DOCUMENT RESUME

ED 412 005 PS 025 865

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TITLE The Effects of Problem-Solving on Academic Achievement in Elementary Education.

PUB DATE 1997-04-00

NOTE 127p.; Master's Action Research Project, Saint Xavier University and IRI/Skylight Field-Based Master's Program.

PUB TYPE Dissertations/Theses (040) -- Tests/Questionnaires (160)

EDRS PRICE MF01/PC06 Plus Postage.

DESCRIPTORS *Academic Achievement; Childrens Literature; Conflict Resolution; Educational Environment; Elementary Education; *Elementary School Students; Interpersonal Competence; Intervention; Mentors; Peer Relationship; Primary Education; *Problem Solving; Special Needs Students; *Student Improvement; Thinking Skills

ABSTRACT

This action research project evaluated the impact of a program for enhancing interpersonal problem-solving skills on academic achievement in elementary students in an industrial, urban Illinois community. The lack of social skills and inability to think critically were documented through office referrals and teacher observations of kindergarten, first grade, special needs, and reading classes. The resulting intervention consisted of: (1) a peer mentoring program in which students in grades 4 to 6 were trained as mentors for teaching social skills, conflict resolution, and critical thinking; (2) cooperative learning activities to enhance student engagement, active listening, turn-taking, appropriate behavior and voice volume, and use of "happy talk"; (3) conflict resolution activities and children's literature to build a positive classroom climate and deal effectively with conflict; and (4) training in critical thinking, including categorizing, brainstorming, questioning, drawing conclusion, sequencing, and evaluating. To assess the effects of the intervention a pre- and posttest were given to check for appropriate social behavior, and teacher journals and checklists were kept throughout the intervention period. Findings indicated an increase in student critical thinking skills, an improvement in interpersonal skills, and an increase in the use of conflict resolution skills. The amount of time spent teaching social skills and conflict resolution increased throughout the intervention. (Nine appendices include data collection instruments and sample classroom materials. Contains 63 references.) (KB)

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The Effects of Problem-Solving on Academic Achievement in Elementary Education

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An Action Research Project Submitted to the Graduate Faculty of the School of Education in Partial Fulfillment of the Requirements for the Degree of Master of Arts in Teaching and Leadership

Saint Xavier University & IRI/Skylight
Field-Based Master's Program
Chicago, Illinois
April, 1997

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ABSTRACT

This report describes a program for enhancing interpersonal problem-solving skills in order to increase academic performance. The targeted population consisted of elementary school students in an industrial, urban community, which is the second largest city in Illinois. The lack of social skills and inability to be critical thinkers was documented through data revealed from office referrals, and teacher observations.

Analysis of probable cause data revealed that students lacked skills related to: antisocial behaviors, unclear societal values, ineffective parenting skills, myth of poverty affecting ability, lack of appropriate student communication and self-expression.

Strategies suggested by knowledgeable others, combined with analysis of the problem setting, resulted in the selection of a peer-mentoring intervention program; the use of cooperative learning; and the implementation of conflict resolution activities.

Post intervention data indicated an increase in student use of critical thinking skills, an improvement in interpersonal skills, and an increase in the use of conflict resolution skills.

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CHAPTER 1

PROBLEM STATEMENT AND CONTEXT

General Statement of the Problem

The students of the targeted elementary schools have inadequately developed interpersonal problem-solving skills; this lack interferes with academic performance. Evidence for the existence of the problem includes observation checklist data and teacher journal entries.

Immediate Problem Context

The population attends a kindergarten through sixth grade elementary, in target schools A and B. Target school A was established on the site of a previous school which was in disrepair and unsafe. In 1972, the neighboring community worked together to advocate for a safe and modernized school for their children. The classrooms are separated by accordion style walls that allow flexibility to the building. The gymnasium is the only original part of the school that was built in 1951. The Gifted Program for students (Grades 1-3) was added later in 1977. The children of the neighborhood have always been housed in this school. Currently, both programs are offered in this facility. There is one classroom of neighborhood students at each grade level first through sixth and two classrooms of kindergarten, plus there are three gifted classrooms of first through third grades. Cooperative activities between both programs add to the school's spirit of community.

Enrollment for school A is 400 consisting of 45.0 % Caucasian, 38.5 % African American, 12.0 % Hispanic, 4.0 % Asian/Pacific Islander, and .5 % Native American students. A Federal Court order requires all classes to meet the plus or minus 15% integration guidelines for desegregation (School Report Card, 1993-1994). There is an average of 23.5 students per classroom. The attendance rate is 95.4% with a student mobility rate of 14%. The number of students from low income homes is 40% of the school's population. A vast majority of the students receive reduced price or free lunch.

The staff of Target school A includes a principal, a secretary, a part-time nurse, a library aide, a computer aide, a general curriculum implementor, a learning disability/behavioral disorder resource teacher, four instructional aides, two Success For All (SFA) Reading teacher/tutors, a SFA implementor, a social worker, a speech specialist, a psychologist, a home-school counselor, a full-time physical education teacher, a full-time music teacher, 17 classroom teachers, a part-time Reading Recovery teacher, a parent-liaison, a support specialist, an enrichment teacher and a 3/5-time art teacher. The principal holds a doctorate degree and has served in the building for two years. The staff teaching experience ranges from 2.5 years to 29 years; 89% of the staff hold a masters degree in education. The average number of years taught by staff is 15 years.

Parent and volunteer involvement are an important aspect of the school. There are two business partnerships with over one hundred active volunteers who participate weekly or bi-monthly by reading to children, listening to children read, or tutoring in any subject area that is needed. Parent involvement can be seen throughout the school on a daily basis.

The school's curriculum is based on the public school model, with the gifted classrooms using the Centralized Gifted Program. Success For All (SFA) is a research based program developed

by R. E. Slavin of John Hopkins University. Chicago Everyday Math is the math program for grades Kindergarten through six. Both instructional programs are used by the Community Academy neighborhood students. The Community Academy and the Gifted Program include the teaching of reading, language arts, math, social studies, science, physical education, art and music. A variety of teaching strategies and styles are used to ensure student learning. Various forms of assessment are used to measure student achievement for each subject area on a regular basis.

Target school B has a population of 400 students enrolled in an elementary school that serves the student population in kindergarten through sixth grade. There are four cross categorical special education classrooms in the school.

The original building was constructed in 1911 with two additions in later years. The building is adequately maintained but is lacking many basic amenities. The student population is ethnically and racially mixed, with 62.5% Caucasian, 32.6% African American, 4.7% Hispanic, and 0.3% Asian/Pacific Islander. A Federal Court order requires all classes to meet the plus or minus 15% integration guidelines for desegregation (School Report Card, 1993-1994).

The school is administered by one principal with an administrative degree and teachers with several years of experience. The teacher population consists of 18 classroom teachers. The specialists include four teachers of students with special needs taught in a self-contained setting, three Chapter 1 teachers, a learning disabilities/behavioral disorder teacher, a full and a part-time speech specialist, a physical education teacher, an art teacher, two part-time music teachers, a SFA implementor, a general curriculum implementor, a psychologist, a social worker, two SFA teacher/tutors, two Reading Recovery teachers, a parent liaison, a part-time nurse, a library aide, and seven instructional aides. There is an of average 22.4 students per classroom. The

attendance rate is 91.6% with a student mobility rate of 34.8%. The number of students from low income homes is 77.4 %. Of the student population, 87 % receive free lunch and two percent receive reduced price lunch.

The school's curriculum is based on the public school model, with SFA reading and Chicago Everyday Math programs implemented. The special needs students are mainstreamed for both the reading and math programs. Special needs students are also integrated for physical education, art and music.

A business partnership with one of the manufacturing companies is moderately active with school functions. Volunteerism in the school is lacking; measures are being taken to improve this situation.

Staff teaching experience ranges from 1.5 years to 30 years. Sixty percent of the staff holds a masters degree in education. The average number of years taught by staff is 14.

The Surrounding Community

This study was conducted in the second largest city in the state of Illinois. The city covers a fifty mile radius that is 80 miles northwest of Chicago and 12 miles from the Wisconsin state border. Its population is approximately 143,263.

The labor force consists primarily of industrial, service and retail jobs. According to the 1990 census, the total labor force was 186,385. The percentage of unemployment is 4.3. The median household income of the community is $31,768. The median sale price of a single family home for 1995 is $88,300.

The educational level of the adult population is very diverse, 23.6% have not completed high school, 36.1% are high school graduates, and 40.3% have had higher education (Rockford Area

Council of 100, 1996).

The targeted schools are both in the same community. This school district consists of 39 elementary schools, four preschool facilities, one center for special education, four high schools, four middle schools, and one district building. The student population for the 1995/96 school year was 27,514. For each student, the district allocates $6,308.00.

Higher education is available in our community through a junior college, a four year private institution, and a satellite site from a nearby university. This university offers both extension and graduate courses. There are also trade schools offering training in nursing, business and industrial arts, which gives the community an abundant source for higher learning.

The first court case in 1989, was filed by the group, "People Who Care." The lawsuit was filed after the school board made the decision to close ten schools to save 7.3 million dollars. Instead of closing, one high school was slated to become a middle school. A second amended complaint was filed less than six months later. In 1991, the Second Interim Order became a federal court order. It required the district to spend 44 million dollars in three years to improve education for African-American and Hispanic students and to desegregate all schools.

The lawsuit impacted the targeted schools' composition with both being labeled C-8 schools. The term C-8 refers to a section in the desegregation lawsuit document. It labels schools that are racially identifiable with more than 50% being African-American or Hispanic. With this ruling, additional funds were appropriated to increase the achievement of minority children (African-American and Hispanic). The lawsuit's premise was minority students had not received an equitable education in the past.

In 1993, the District went on trial on charges of discrimination. A decision was made between

the teachers' union and trial district plaintiffs to appoint a Special Master to facilitate desegregation programs. Later in the year, a third amended complaint was filed. In 1994, a Federal Judge found the district guilty of intentional, massive discrimination against African-American and Hispanic students. The court ordered a remedy to eliminate all evidence of discrimination. Since this time, pending matters have included attorney's fees, faculty and staff hiring, and the development of a remedial order.

State and National Context of Problem

A public opinion poll in the state of Illinois, confirms that improving education is the number one priority for Americans (IEA-NEA Advocate, 1996). Plato once said, "What is honored in a country will be cultivated there" (Morrow, 1989, p. 230). The same can be said of schools. The chosen issue of students needing problem-solving skills is a national problem. The paradigm shift in education is going from letting go of our obsession with textbook learning, individualism, and external evaluation to the ability to use cooperation, higher order thinking, interdependent teamwork, creativity and self-assessment. This shift is necessary for success in the areas of technology, leadership, productivity in the work force and for the quality of life of our children.

In 1990 Paris and Winograd reported, "As students read and work together this stimulates and promotes metacognitive insights that are central to the effective use of learning strategies to enhance higher order thinking" (Paris and Winograd, 1990, p.230). It is their belief that when students can analyze and talk about their own behavior with the teacher or peers, they make their thinking public and create better opportunities for understanding. "Students are able to relate how and why they should use a particular learning strategy," as stated by Winograd and Gaskins (1992, p. 230).

Could cooperative learning be an effective method to address this issue? Many nationwide workshops for cooperative learning and teacher college training attempt to address student problem-solving abilities. Courtenay states, "It is the final charge of teachers to develop *independence of thought,* " he believes this is "the greatest gift that teachers can give" (Courtenay, 1989, p.225). As educators, we assume a responsibility to help students build a broad foundation of knowledge across a variety of topics. This helps students to learn independently by using their knowledge flexibly and creatively.

It is the teachers' responsibility to help children make intelligent choices not arbitrary ones or choices of avoidance. When children learn to make good choices, they are more committed to the learning process. They acquire habits that make them life-long readers, writers and problem solvers in all areas of learning and living. "Teaching children to change thought processes, as well as, teaching the specific learning skills is necessary to improve social functioning" (Durlak, 1990, p. 27). As educators, the future requires us to open new windows for academic and social competence in children.

CHAPTER 2

PROBLEM DOCUMENTATION

Problem Evidence

In order to document the inadequately developed interpersonal problem-solving skills interfering with academic performance teacher journal entries and observation checklist data were used over a period of time from September through January.

There were four classes participating in this study: kindergarten, first grade, special needs and reading. An observation checklist was developed to record the occurrences of behavioral incidents. Table 1 and figure 1 present a summary of the behavior categories observed, and the number of incidents in each category.

Table 1

Categories and Numbers of Incidents of Targeted Behaviors for the month of September, 1996

	Kindergarten	Grade 1	Special Needs	Reading	Total
Not on task	57	63	93	74	287
Inappropriate Physical Contact	18	31	13	7	69
Excessive Talking	50	26	89	15	180
Derogatory Language	10	39	8	4	61
Total of Incidents	135	159	203	100	597

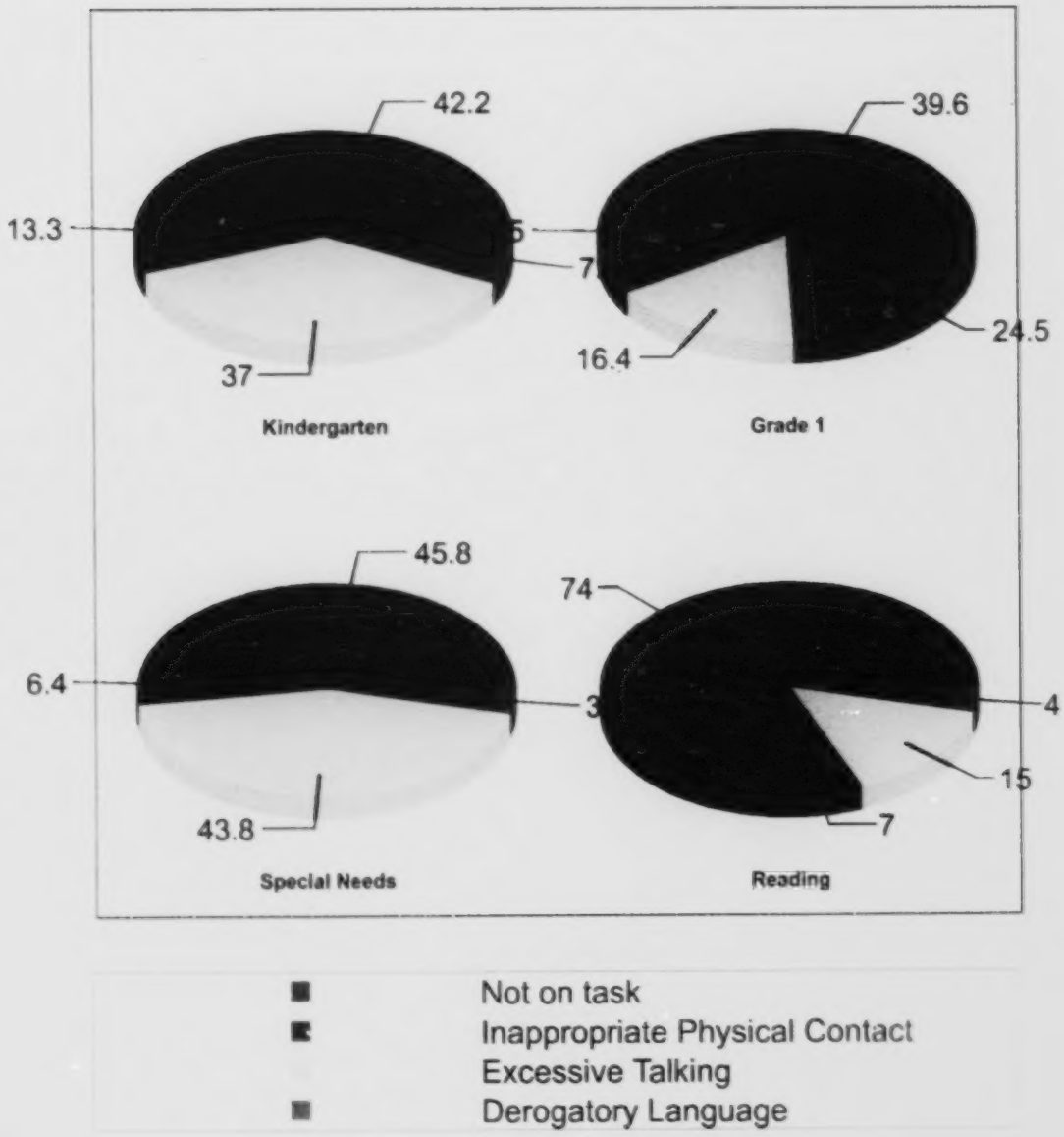

Figure 1 Percentages of Incidents of the Targeted Behaviors for the Month of September, 1996

In kindergarten the biggest problem was off task behavior followed by excessive talking. The least difficult problem in kindergarten was derogatory language. Of the 135 behavioral incidents during the month of September, only 10 occurrences or approximately 7% dealt with derogatory language. Teacher journal entries noted that students found it difficult staying with the group; occasionally they were out of their seats directing questions to the teacher. Over 42% of the behavior incidents dealt with students not being on task. Excessive talking occurred 37% of the time. The remaining 13% of occurrences involved inappropriate physical contact. In the month of September, there was constant talking and poor listening evidencing off-task behavior. There were also periods of time during listening comprehension, when students were enthralled while listening to the teacher read. Three students in the targeted kindergarten class, were found to be excessive talkers and had difficulty staying on task. At times, students were found to be actively involved in their own learning. Inside voices were used, but at times the level of noise escalated. Kindergartners were still exhibiting frequent occurrences of not keeping hands, feet and objects to themselves. Some students lacked the maturity to sit still and follow directions over a period of time.

In first grade the biggest problem was students not being on task. Almost 40% of the students' behaviors dealt with being off task and one quarter of the student behaviors were for using derogatory language. Incidence of inappropriate physical contact and excessive talking together equal 36%. Students being off task occurred as often as the inappropriate physical contact and excessive talking combined. Teacher journal entries noted that only a few students were responsible for the majority of the off-task behavior. Active listening was apparent when the teacher gave constant cues and reminders for this to happen. Students had a hard time keeping

hands, feet and objects to themselves resulting in frequent behavior conflicts. The majority of students expected the teacher to intervene and solve conflicts when dealing with other students. Transition and recess time were the most difficult for the students. With twenty five students in the classroom, the noise level is still extremely high. The classroom's high ceilings and lack of carpeting adds to the increased noise level.

The biggest problem in the special needs classroom was students not on task; this behavior category was followed closely by excessive talking. There was only a two percent difference. In In the area of inappropriate physical contact the number of incidents was low. Derogatory language had the lowest percentage of incidents at 3.9. These students are mainstreamed in various subject areas throughout the day. Teacher journal entries noted that only a few students have a hard time keeping hands, feet and objects to themselves during transition time. Teacher noted that students were trying to use verbal praise, such as one student telling another that she was proud of them for returning a note to the teacher. Another student picked up a pencil and was given a "thank you" response from another student. The teacher of the special needs classroom plans activities for conflict resolution with the students. The teacher has observed higher order thinking when questioning students, but students lack the skills to transfer this skill into daily learning.

The biggest problem in the reading classroom was students not on task. This percentage of occurrences accounts for 74% of the total incidents. The remaining 26 % of the behaviors describe excessive talking, inappropriate physical contact and derogatory language. Derogatory language was the lowest with 4% while inappropriate physical contact followed closely with 7%. It was observed only a few students found it difficult staying with the group. Students were good

at sharing during partner reading and story retell time. Students could be observed raising hands and frequently helping each other. There were periods of time during listening comprehension when students were eagerly listening to the teacher read. Inside voices during work time were used on a frequent basis. As the students became more involved in the activity the noise escalated. Students were found to be very social and chatty during transition times. It is noted that students had good manners and there were few put-downs.

Table one represents data on the number of behavioral incidents in kindergarten, first grade, a special needs class and a reading class. The data were collected during a six hour school day, with the exception of reading which was a ninety minute block of time. Across all categories the biggest problem was off task behavior. First grade had the smallest percent at 39.6% of off task behavior with reading having the largest at 74%. Excessive talking represented 30% of the total number of incidents. Nearly 50% of the observed misbehavior involves students being off task. Some 11.5% of the total indicate inappropriate physical contact; while 10% of the total reflect derogatory language. Special needs and reading students have one-third fewer occurrences of physical contact. Out of the four categories, no classroom had zero occurrences in any of the targeted behaviors. The following data were collected from targeted schools A and B. These data were gathered from information based upon teachers' journals and a checklist collected on a daily basis. The social skills targeted included:

1. Staying with the group
2. Active listening
3. Taking turns/sharing
4. Keeping hands, feet, and objects to oneself
5. Using inside voices
6. Happy talk
7. Resolving conflicts
8. Higher order thinking

When students were asked to stay with the group they were expected to be active listeners and take turns, use inside voices and encourage teammates using "happy talk". Happy talk was defined as encouraging others and giving positive feedback. The goal was for students to be able to solve problems using conflict resolution skills. Teachers looked for students using higher order thinking skills.

After the initial observation was completed a student survey was administered to address students' attitudes. The student survey consisted of six questions. The survey noted the students' attitudes toward school (Appendix A). The results are listed in the following graph:

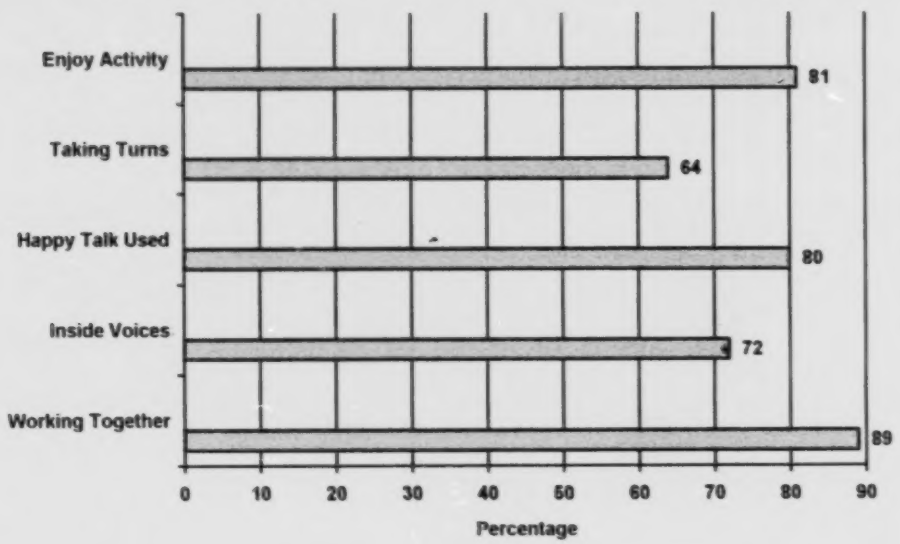

Figure 2 Students' attitudes toward school in September, 1996; Percentage giving response

The highest percentage was how well students stated they worked in groups. The lowest percentage was in the area of whether or not students felt they were taking turns. Students responded that they enjoyed working in groups. It is apparent that most students said they used social skills in the group setting. The majority of students felt happy talk and inside voices were used.

Probable Causes

Observations and journal writing by teachers provided data for the probable cause factors. A list of probable causes gathered from the two target schools are as follows:

1. Antisocial behaviors dealing with societal issues of violence and poverty are carried over into the classroom. Conflict resolution programs are being implemented by support staff as well as teachers.

2. Lack of student dialogue and self-expression in the classroom results in students being unable to interact with others. Time outs and office referrals are on the increase.

3. Single parent homes show the decline of the family structure. More than fifty percent of targeted students live in single parent homes.

4. Lack of critical thinking skills in the content areas inhibit understanding. There is a lack of transfer in daily problem-solving situations.

5. School programs do not meet all students' learning needs. The students are presented with one method to learn reading and math. The targeted choice of reading and math programs have a format that must be implemented.

A summary of probable cause data gathered from the site permit these conclusions: the targeted students' lack of problem-solving skills is related to societal issues as well as curricular constraints within the school setting.

Several underlying causes for the lack of problem solving skills in the school setting have been identified, in the professional literature (Pogrow, 1990, Willis, 1992, & Young, 1992).

Poverty, violence, handicapping conditions, racism, unemployment, poor housing, lack of health care, gangs, drugs, and dysfunctional families are some of the issues that affect school achievement (Haberman, 1995). According to Haberman (1995) school is a matter of life and death for some children living in poverty. Children's options for making it in today's society are limited. They lack the family resources, networks, and out-of-school experiences that could compensate for what they are not offered in school. Antisocial and aggressive behaviors are also

escalating in schools (Walker & Sylwester, 1991). Schools are moving antisocial children into school-based specialized placements or home tutoring programs to assist in academic success. Students who show antisocial behaviors experience difficulty in a normal school setting. Society expects the schools to solve this problem alone (Walker & Sylwester, 1991).

According to a 1990 Carnegie Foundation research study (as cited in Wagonseller, 1992), educators consider inadequate parenting the major problem facing American education. Another alarming statistic states that nine out of ten parents were apathetic about their children's education (Wagonseller, 1992). "Education begins at home, not on the first day of school" (Cordova, 1991, p. 81). Education should also be a home/school combination that takes place throughout childrens' lives, not one day a month at a PTA meeting (Cordova, 1991).

A recent report by the National Center of Health Statistics blames parents for many childrens' troubles (Burke, 1991). Children experience more emotional and behavior problems when parents are both physically and emotionally absent from their lives. Although the United States now has a national education goal by the year 2000, "every child will arrive at school ready to learn," many are behind before formal education ever starts (O'Neil, 1991). Low birth weight, maternal smoking, prenatal alcohol exposure, prenatal exposure to drugs, lead poisoning, child abuse and neglect, and malnutrition are all preventable conditions associated with children developing learning problems.

Bacon and Thayer-Bacon (1993) believe students need to be able to cope with individuals who have opinions different from their own. Students are quick to judge others, rather than to listen actively. Glasser believes (as cited in Gough, 1987) some classrooms today abide by the philosophy that each student works alone. Keep your eyes on your own work; don't share; don't

talk; are a few of the directions teachers give to students who wish to interact. This approach is totally contrary to the basic human need to belong (Gough, 1987). It is hard for students to develop self-expression when not given the opportunity to practice it in the classroom.

The modern nuclear family is fast disappearing. David Elkind (as cited in Scherer, 1996) in a conversation with Marge Scherer describes what we have now as the postmodern family, which he calls the permeable family—two parents working, single-parent families, adoptive families, remarried families, and so on. Elkind states the permeable family is more fluid, more flexible, and more obviously vulnerable to pressures from outside itself. This type of family mirrors the openness, complexity, and diversity of our contemporary lifestyles (Scherer, 1996). With unclear societal values and changes in the family structure, valuing of education is declining. The public has ambivalent views of education, while parents feel schools should have higher standards. Still, parents are also reluctant to have their children work hard enough to achieve these standards (Jennings, 1996). Parents need to agree that academic achievement is truly important. If we really want students to do better, parents will need to make greater demands on their children. It is important for families to remain involved in their childrens' learning. The ways in which parents need to be involved will undergo fundamental changes during their child's school career. Front line workers---teachers, and other school personnel are key players in family involvement. It is through these front line workers, that families are connected to the services provided by the school or community (Rutherford & Billig, 1995).

Students are unable to perform on a higher level of critical thinking (Seldin, 1992). These advanced skills have been scarce in American education (Knapp, Shields, & Turnbull, 1995). Part of this problem is how the American students are taught. Goodlad concluded (as cited in

Seldin, 1992) that 75% of class time is dedicated to instruction while critical thinking time is encouraged only one percent of class instruction time. Most curriculum guides omit critical thinking components. Teachers believe they teach thinking skills, but in reality they are only asking students to participate (Seldin, 1992). Einstein said, "The formulation of a problem is often more essential than its solution" (Seldin, 1992, page 2).

Our childrens' failure in school has nothing to do with their intelligence (Hillard, 1991). School programs do not meet all students' learning needs. Educators have the responsibility to teach all children. All children do not have the same learning style. Children who do not master basic skills risk the chance of not learning more advanced skills (Jennings, 1995). Some classrooms put advanced skills at the center of learning opportunities, while other classrooms place emphasis on traditional practices. Too often teachers fail to focus on skills which will address a student's strengths and weaknesses (Gardener & Hatch, 1988).

CHAPTER 3

THE SOLUTION STRATEGY

Literature Review

Analysis of probable cause data suggests reasons for the lack of interpersonal problem-solving skills that interfere with academic performance. The research literature suggests the following probable causes:

- school programs lack flexibility to meet all students learning needs,
- students' ability to interact with others is ineffective,
- parent ineffectiveness leads to antisocial behavior,
- societal issues such as violence impact on student behavior,
- lack of critical thinking skills in reading and writing are pervasive.

A search of the literature was conducted and the following four categories of solutions were addressed:

1. Peer mentoring,
2. Cooperative learning,
3. Higher order thinking,
4. Conflict resolution.

One promising method for promoting social and academic success is peer mentoring. (Bennett,

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1987, Bloom, 1984, Ezell, Hoel, Kohler, Miller, & Strain, 1993, Riessman, 1989, Leland & Fitzpatrick, 1994). "A system of grouping 25 or more same-age students shackled together and clomping along in rigidly scheduled lock-step curricula needs to die" (Swengel, 1991, p. 704). For learners to take an interest and become involved in their own learning, they need purpose and ownership of that learning. Students learn far more when performing in the teaching role than when acting as passive learners in the classroom (Cartledge, Giesecke, & Gardner, 1993). The teacher's job, then is defined as maximizing student learning efficiency (Riessman, 1989).

Peer mentoring is a one-on-one situation where older students help younger students. Peers are used as instructional representatives for their classmates or other children (Bennett, 1987; Melaragno, 1977 as cited by Ezell, et al., 1993). There is evidence that one-to-one mentoring may produce the greatest return on student learning (Bloom, 1984, Delquadgri, Greenwood, Whorton, Carta, & Hall, 1986 as cited by Cartledge, Giesecke, & Gardner, 1993; Ezell, et al., 1993). This produces an expansion of human resources as children become active givers, while learning through teaching and being helped by helping (Ezell, et al., 1993, Riessman, 1989). Students experience the "helpers" high, the positive feeling that accompanies the helping process. Recipients of help then in turn can become helpers, such as, eighth-graders mentoring sixth graders who in turn mentor fourth graders (Riessman, 1989).

Older students enjoy working with younger students and find it rewarding. The older students feel important being the "teacher" (Leland & Fitzpatrick, 1994). Younger students gain guidance and the feeling of security, while the older students gain the experience of working with younger students, and have the opportunity to be a positive role model. Older students learn new empathy for others. Their experience of trying to get younger students to cooperate gives new insight into

their own behavior (Bennett, 1987). Also, older students reduce learning pathology and build strengths in decision-making skills plus coping skills for going through adolescence (Riessman, 1989).

Students who participate in mentoring programs, both as mentors and mentees, show greater cognitive growth and attitudinal gains than students who do not. Mentors develop more positive attitudes toward the mentees they are working with and gain better understanding of the principles they are teaching. Mentoring requires the mentor to "teach" the mentee in order to understand the academic content well. Helping others learn must be recognized as an essential learning experience for everyone (Cohen & Kulik, 1982 as cited by Swengel, 1991).

Two graduate students from the University of Chicago compared three methods of learning: the conventional method, the mastery learning method, and the mentoring learning method. The conventional method of direct instruction was defined as one teacher teaching about 30 students. The mastery learning method follows the test with corrective procedures and a parallel test to determine what subject matter is mastered. The mentoring method of instruction uses one good tutor with one, two or three students. Instruction is followed by tests, feedback-corrective procedures, and parallel form tests. In these groups, students were assigned at random. Then, periodic tests were given to determine student learning. The number of students and testing conditions were duplicated for both the mentoring and mastery learning methods Results showed students in the mentoring group out performed students in the conventional group by 98% and the mastery group out performed the conventional group by 84%. The mentoring process demonstrates most students do have the potential to reach high levels of learning (Bloom, 1984).

It is reported that mentoring increases benefits even more for the at-risk students and students with disabilities (Cartledge, Gardner & Giesecke, 1993, Ezell, et al., 1993). The benefits of low achievers being mentors include: a better self-concept, greater self-confidence in academic performance, better relationships with others, improved classroom behavior, decreased absenteeism, and the opportunity to become role models (Shaw, 1973 as cited by Cartledge, Gardner, & Giesecke, 1993). Low achievers often grow dramatically when given the responsibility of a younger child's learning (Berliner & Casanova, 1988).

Limited and short-term benefits are achieved when peer mentoring is used informally, but when this method is used in a structured format, with procedures being taught on how to instruct, greater results are gained. The format consists of teaching, reinforcing, and correcting instruction through student and or teacher feedback. The students benefit from the high rate of practice generated through this instruction method (Cohen, Kulik & Kulik, Kalfus, 1984 as cited by Ezell, et al., 1993).

The structured model for peer mentoring designed by Ezell, et al., (1993) includes four components: planning, training, monitoring/evaluating, and problem-solving. The planning phase includes identifying the skills to be taught, selecting the materials to be used, determining what procedures to use and selecting the time and frequency of mentoring (Ezell, et al., 1993). The new ethos of community is released through feelings of ownership, involvement and empowerment (Riessman, 1989).

There is a need for defined structures and responsibilities for the older students, younger students and the teachers. Teachers must be creative, flexible and cooperative for the mentoring program to grow and succeed. It is very important for the older students to be cooperative

(Bennett, 1987). The critical components in a peer-mentoring program are the adequate training of mentors and the on-going supervision of them (Swengel, 1991). Training involves introducing the rationale for the skill to the mentors, modeling correct mentoring procedures, and permitting time for mentors to practice procedures until procedures are mastered (Ezell, et al., 1993). Once training has been completed, observation of start-up procedures, transitions, student interaction, and closure procedures are necessary (Ezell, et al., 1993). What will be evaluated is student progress and products.

The last stage of the mentoring model is problem-solving. It identifies problem areas in procedures; solutions are then generated and implemented. Through this system instruction is maximized, the resource pool of available "teachers" is increased, and sound academic principles are taught. Also, socially correct behavior is practiced on a regular basis (Ezell, et al., 1993). Older students want to be wanted and needed for something that's important and useful. Valuable resources should not be wasted. (Bennett, 1987).

Mentoring integrates learning and friendliness; it nurtures patience, tolerance, respect, good humor, and affection (Swengel, 1991). A peer mentoring program will provide students with social benefits (Bennett, 1987, Hedin, 1987, Maheady, Harper & Sacca, 1988, Franca, 1990 as cited by Ezell, et al., 1993). Educators often forget learning is basically social. Mentoring allows students to work and cooperate together in a relaxed classroom atmosphere (Bennett, 1987). Mentoring programs provide ideal learning experiences because they combine intellectual subject matter and human relationships. What is learned are skills, learning to listen, and the ability to speak with head and heart. Both parties' self-esteem grows (Swengel, 1991).

The most significant advantages to mentoring are the effective way teachers can maximize

instructional influence and experience the opportunity to increase skill improvement. Ultimately, it will be through this process of peer mentoring that students will build the necessary skills, personal confidence, and the satisfaction of learning together to become successful and responsible students.

Most educators agree students must have social skills in order to work cooperatively at school (Andersen, Nelson, Fox & Gruber, 1988). Whether a student is in the classroom or in a real life setting, being able to cooperate and work together is a must. Children are not born instinctually knowing how to cooperate with others (Johnson & Johnson, 1990). When teachers have the opportunity to teach and work with children, they find it difficult when students lack skills that are necessary to interact successfully with others. Interpersonal and group skills do not appear the first time children are asked to work together. Many teachers find it difficult to teach the basics of reading, writing, and math plus teaching the skills of cooperative learning. Johnson and Johnson (as cited by Lew & Mesch, 1986) found that, along with teaching in the classroom, we should include the teaching of social competence and decision making.

Cooperative learning uses the concept of group learning to achieve the necessary instructional outcomes (Andersen, et al., 1988). Each member of the group is responsible for helping other members learn. Johnson and Johnson (as cited in Andersen, et al., 1988) found that in a cooperative goal structure students work in heterogeneous groups to accomplish a common goal. All group members should work together and use knowledge from each other. Individual students will learn a part of the problem and then teach their part to other group members. All members sign a completed assignment indicating they know the answer, have completed the task, and are prepared to explain it.

Some of the positive aspects of cooperative learning are:

1. Social skills are taught directly,
2. Students practice social skills,
3. Roles are assigned for student accountability,
4. All members are responsible for learning the material,
5. Processing evaluates academic and social behaviors.

Cooperative learning provides experiences for children to work together and have a productive outcome.

Slavin, and Johnson and Johnson (as cited in Bellanca & Fogarty, 1991) found cooperative groups increase mastery of the basic skills. Reading and math scores increase and students report they enjoy working together (Weaver-Jimenez, 1992). Cooperative learning has developed positive results. Cooperation promotes higher achievement and self-esteem.

As cited in, *Blueprints For Thinking In The Cooperative Classroom* (Bellanca & Fogarty, 1991) a study done by Bruce Joyce (1986) found cooperative learning to be "overwhelmingly positive" in all curriculum areas. Cooperative learning is a powerful instructional strategy. Cooperative learning provides a greater opportunity when combined with strategies that challenge students to solve problems and be critical thinkers (Bellanca & Fogarty, 1991).

There are some reasons why educators would choose another mode of instruction other than cooperative learning. Wassermann (1989), states it is hard to have children working as self-motivated learners. Simply placing children in groups and telling them to work together does not ensure group success (Quinn, Jannasch-Pennell & Rutherford, 1995). Educators have to teach the skills of working together. A child's world is centered around the "I" and not the "we".

Wassermann (1989) believes teachers must provide experiences pupils need in order to develop these skills of working together. Children can learn to work in groups over time. Until the skills are taught, students often have a hard time taking ownership of their learning. They can gain the knowledge and behaviors needed to carry out tasks that require cooperation.

In spite of all of the research on cooperative learning, some educators believe teachers still need to do direct instruction (Gersten & Keating, 1987). Teachers cannot replace the instruction of math and learning with the practice of cooperative learning. "Direct instruction is a highly interactive approach to teaching" (Gersten & Keating, 1987). Teachers are easily accessible to the students and guide their thoughts by providing feedback and modeling problem solving. Gersten and Carnine (as cited in Gerseten & Keating, 1987) found that with the teacher-student feedback there is a positive classroom climate, and increased self-concept with a higher rate of academic success. When the components of direct instruction and cooperative learning are used in a caring, educational setting, the results are carried through every aspect of life. When a teacher combines direct instruction with cooperative learning, the outcome is success. Teachers know that when they teach children and provide them with opportunities to grow and learn they eventually do (Wassermannn, 1989)

There has been research on the effects of cooperative learning (Bellanca & Fogarty 1991, Johnson & Johnson, Lew & Mesch 1986). Madden & Slavin (as cited by Lew & Mesch, Johnson & Johnson, 1986) stated that research on cooperative learning is mainly dominated by short-term studies. The reasoning behind this is that short-term studies tend to offer more verification that cooperative learning is actually taking place in the classroom in acceptable form and frequency. Positive peer relationships seemed to develop through cooperative learning. Students who

worked in groups tended to achieve higher than those who worked in an individual setting. Asher (as cited in Lew & Mesch, Johnson & Johnson, 1986) states that interventions aimed at improving the social status of socially withdrawn students must provide opportunities for students to work together and develop the skills of peer interaction. During cooperative learning activities, less isolation takes place which allows for more positive relationships to be formed (Quinn, Jannasch-Pennell & Rutherford, 1995). Students seem to achieve goal interdependence and feel successful about the group interaction.

Children are better equipped for the future if they are good thinkers (Willis, 1992). Teachers, can no longer just tell students to put on their thinking caps. Teachers need to become much more active in helping students think clearly and logically and to monitor and assess their own thinking.

In recent years, educators have come to see a revolution in thinking (Pogrow, 1990). Educators need to pay more attention to students' thought processes. Students need to know how to solve the problem, not just memorize the answers.

There are three common approaches to teaching higher order thinking (Willis, 1992). The first is to create a classroom atmosphere that develops thinking without direct teaching of thinking skills. This is usually accomplished through a Socratic questioning technique. Educators prompt students to enhance and rethink their thinking.

The second approach is infusion of thinking skills into regular classroom instruction. Teachers generally teach thinking skills directly in the context of subject matter content. The most commonly taught skills are predicting, hypothesizing, remembering, comparing and contrasting, analyzing, inferring, decision making, problem solving and deductive reasoning.

The third approach is separate courses for teaching thinking. In this approach, thinking processes are taught outside of the subject matter content. Separate programs include Feuerstein's Instrumental Enrichment, Lipman's Philosophy, and Pogrow's Higher Order Thinking Skills (Willis, 1992).

Two challenges in teaching thinking are how to assess students' thinking and how to revamp the curriculum so that it requires more thinking and less factual recall (Lombardi & Savage, 1994). McTighe reported (as cited in Willis, 1992) assessments should include challenging tasks without obvious solutions. It is more important to notice how students approach a problem.

Teachers tend to teach in the same manner as they were taught (Seldin, 1992). Teachers' ideas of knowledge emphasize collecting information rather than infusing knowledge and skills of analysis, investigation, and evaluation. Educators who open doors to higher order thinking and often show behavior consistent with such inquiry, encourage students to do the same. "Conversely, teachers who close the door to personal inquiry and intellectual challenges dissuade students from thinking critically" (Seldin, 1992, page 2). In a higher order thinking classroom, teachers reward students not only for solving problems but also for finding them.

In core content areas, students may have basic level abilities, but may lack the higher level skills needed for problem solving (Seldin, 1992). According to the 1992 Curriculum Report, "Many Americans are concerned about the inability of today's youth to think critically; to analyze, hypothesize, infer, question, generalize, and evaluate" (Seldin, 1992, page 5).

It is agreed by many researchers that some form of higher order thinking must be taught (Young, 1992). The major disagreements include deciding on the most helpful skills to be taught and creating productive instructional delivery methods (Crump, Palk, & Schlichter, 1988).

Opinions differed as to what these skills are, but most agreed that "problem solving abilities or cognitive enhancement can be taught, and that higher order thinking skills can be affected by instruction" (Young, 1992, p. 48). Many names of overlapping skills and category divisions occur in available programs. Even though many different systems and arrangements exist, the similarities include reasoning, categorizing, and problem solving. The main process is gaining knowledge through questions. Again, it is made evident that thinking skills should not be taught just by themselves, but be infused into the existing curriculum (Young, 1992). It is also pointed out as a warning that teachers need to be realistic about higher order thinking. There must be a commitment of the faculty to the process for it to be successful. Also, educators need time to become better at thinking and so do students.

"Many educators believe that specific knowledge will not be as important to tomorrow's workers and citizens, as the ability to learn and to make sense of new information" (Gough, 1991, p. 1). No matter what method or methods of instruction a teacher uses, he or she must prepare children to be productive thinkers. One must decide what can fit into the existing curriculum and begin utilizing it. Remember to feel comfortable with it, because a positive role model sends out positive messages. Researchers have many ideas on the how and why of higher order thinking. What the educator needs to do is read through the research and infuse a variety of strategies to accommodate the needs of the students. The teacher must make an effort to include higher order thinking into the daily routine that relates to students' real lives.

One of the biggest problems teachers face in classrooms today is student-to-student conflict (Stomfay-Stitz, 1994). Those who study conflict resolution identify it's origin with Mary Parker Follett's Research in the 1920's. Follet's research concentrated on conflict resolution as integration of the need "of bargainers". This field of conflict resolution has grown into a tool,

used in business management, intergroup and community mediation, divorce settlements, the juvenile justice system, the civil court, and in international negotiations (Stomfay-Stitz, 1994).

Conflict resolution allows students to peacefully bargain with each other, hear both sides of the dispute, hear different viewpoints and value other opinions (Stomfay-Stitz, 1994). In order for conflict resolution programs to be successful, they must be comprehensive, thus involving students, teachers, families, and the community. Resolving conflicts should be taught both at school and in the home. Children's thinking emphasizes a process where children share conflicts with either a teacher, parent, or peer. Vygotsky found (as cited in Stomfay-Stitz, 1994) when children use their own language and thoughts, this will serve as a vehicle for their own development for solving conflicts. In solving student conflicts, trained students help disputing students generate and evaluate options for reaching a mutually acceptable solution to their problem (Townley, 1995). Conflict resolution gives young people the ability to alter not only their behavior, but also others' behaviors. This extension of resolving conflicts will impact the culture of our future society at large. What educators teach our children now, prepares them to solve conflicts in the future (Brook & Kann, 1993).

For conflict resolution to be successful in school systems, one must understand the school system, student population, faculty population, and the community and its social organizations. As conflict resolution skills are learned and practiced, these skills will be carried over into the community causing a safer and more harmonious world (Townley, 1995).

The implementation of conflict resolution has five stages:

1. Form a planning committee whose members reflect the communities' culture, race and gender;

2. Conduct workshops to educate the school community about conflict resolution;

3. Adopt mediation as an option to resolving conflicts;

4. Establish or purchase a conflict resolution curriculum;

5. Designate a conflict resolution coordinator. (Huffman, 1993).

Then as problems generate, students will be trained to mediate various conflicts.

Children need to watch adults think through problems and use conflict resolution skills. As children see conflict resolution being implemented they practice these newly observed skills themselves (Seifert, as cited in Stomfay-Stitz, 1994). As students learn and practice decision-making processes, they develop the skills needed for making choices in conflict resolution (Brook & Kann, 1993). Children tend to remember and duplicate skills when they verbally and mentally work them out using conflict resolution processes (Stomfay-Stitz, 1994).

Schools must take a comprehensive approach to influence students in a positive learning experience. Ethnic and social development is a part of student learning to heighten self awareness and the tolerance of others using conflict resolution (Lickona, as cited in Leming, 1993). By practicing conflict resolution, students' social and emotional skills are strengthened as they learn to listen to the ideas of others (Schmidt, Friedman & Marvel, as cited in Stomfay-Stitz, 1994). The social and emotional skills of conflict resolution encourage reflective listening, allowing students to compromise and express honest feelings (Nattiv, Render, LeMire & Render, as cited in Stomfay-Stitz, 1994).

Project Objectives and Processes

Students lack of problem-solving skills interferes with academic performance. Teacher observation, teacher journaling and professional literature indicated there was a need for a mentoring program involving peer tutoring to foster problem-solving skills. Therefore, the

primary objective is as follows:

> As a result of implementing a mentoring program that employs higher order thinking skills, cooperative learning and conflict resolution strategies during the period of September 1996 to January 1997, the mentors and mentees will increase academic performance and the use of problem-solving strategies in content areas.

The probable causes, as measured by academic growth and development would increase in both the mentor and mentee. The social benefits of peer mentoring include: a better self-concept, greater confidence in academic performance, improved relationships with peers, reduced absenteeism, and better classroom behavior as students become better role models.

In order to accomplish the project objectives, the following processes are necessary:

1. Teachers will provide or design a series of learning activities that address problem-solving skills and engage students in higher order thinking during mentoring activity time.
2. Teachers will teach and model cooperative learning strategies to be used by mentors and mentees.
3. Teachers will teach the mentors and mentees conflict resolution strategies.

Project Action Plan

I. Pretest

A. Groups
   1. Task groups
   2. 2-3 students in each group
   3. Random selection will be done by color matched popsicle sticks
   4. Completed one time at the beginning of the year

B. Activities (Appendix B)
   1. Grades K-1
      a. Listening to Teacher directions
         1. Color the picture
         2. Cut on black lines to make the puzzle pieces
         3. Assemble puzzle with partner

      b. Partner Puzzle
         1. Students assembling puzzles
         2. Teacher observing students interaction

   2. Grades 3-6 Including Special Needs
      a. Listening to Teacher's directions
         1. Students observe pictures on overhead for 3 minutes
         2. Students brainstorm and make a list of remembered pictures from the overhead
         3. State group outcomes of problem-solving strategy for remembering objects

      b. Game of 26
         1. Students individually observe overhead for 3 minutes
         2. Make list of objects
         3. Discuss and state problem-solving strategies used

C. Observation Check List (Appendix C)
   1. Targeted behavior defined as productive behavior necessary for learning
   2. Not on task
   3. Inappropriate physical contact
   4. Excessive talking out of turn
   5. Derogatory Language/Put-downs

II. Cooperative Learning (Appendix D)

A. Staying with the group
   1. On task-staying with the group
   2. Participating with group activity

3. Team building activities
    a. T-chart
    b. Electricity activity (Shaw, 1992)
    c. Trust Walk activity (Shaw, 1992)
    d. Building structures
    e. Process

B. Active listening
    1. Eye contact
    2. Nodding
    3. Leaning forward
    4. Listening activities
        a. T-chart
        b. Think-Pair-Share (Shaw, 1992)
        c. "Are You Listening?" Game
        d. Mac-A-Lena (Chapman,1993)

C. Taking turns
    1. One person at a time participates
    2. Sharing ideas and equipment
    3. Role-playing
    4. Sharing activities
        a. Grades K-1
            1. T-chart
            2. Partner Reading
            3. Hot Potato game
            4. Concentric Circles (Molyneux, 1991)
            5. Process

        b. Grades 4-6 including Special Needs
            1. T-chart
            2. Partner Reading
            3. Story Retell
            4. Sharing Shields (Kagan, 1992)
            5. Process

D. Keep hands, feet, and objects to oneself
    1. Role model appropriate behavior
    2. Students responsible for their own actions
    3. Self-control activities
        a. T-chart
        b. The Beat Goes On (Chapman, 1993)
        c. Process

E. Using inside voices
   1. Six inch voices
   2. Noise level cues
      a. Lights out
      b. High Five
      c. Finger Snap
      d. Ring bell
   3. Noise level activities
      a. Grades K-1
         1. T-chart
         2. Venn Diagram-Inside Voices/Playground Voices
         3. Process

      b. Grades 4-6 including Special Needs
         1. Zoo sounds (Shaw, 1992)
         2. Team building (Shaw, 1992)
         3. Process

F. "Happy Talk"
   1. Using encouraging words
   2. Personal and group affirmations
   3. Affirmation activities
      a. Grades K-1
         1. T-chart
         2. Process

      b. Grades 4-6 including Special Needs
         1. Alliterative names (Shaw, 1992)
         2. T-chart
         3. Process

III. Conflict Resolution Instruction (Bodine, Crawford, Schrumpf, 1994) (Appendix E)

A. Defining a positive classroom climate
   1. Students' rights and responsibilities
   2. Ground rules for classroom meetings
   3. Definitions of cooperation
   4. Rewards
   5. Consequences

B. Dealing with Conflict
   1. Definition of conflict
   2. Causes of conflict
   3. Student values and needs
   4. Respond to conflict

5. Outcomes

C. Non-violent Environment Strategies
   1. Definition of non-violence
   2. Principles of non-violence
   3. Student responsibility for maintaining peace
      a. emotion management
      b. emotion expressed toward others
   4. Resolving conflicts

IV. Peer Mentoring

A. Steps in mediation
   1. Identify the problem
   2. Gather Students' points of view
   3. Compromise strategies
   4. Resolution Agreement

B. Peer-Mentoring Program
   1. Train mentors in grades 4-6
      a. Bonding activities
      b. Introduce social skill
      c. Target specific social skill
      d. Teacher model social skill
      e. Student practice social skill
      f. Closure

   2. Mentoring activities for Mentee (Appendix F)
      a. Bonding activities
         1. I Care Name Tags (Schmidt, Friedman, 1990)
         2. I Know That Feeling (Schmidt, Friedman, 1990)
         3. What should I do (Schmidt, Friedman, 1990)

      b. Student role modeling targeted social skill
      c. Children Literature for Conflict Resolution (Kreidler, 1994) (Appendix G)
         1. Alexander and the Terrible, Horrible, No Good, Very Bad Day by Judith Viorst
         2. The Grouchy Ladybug by Eric Carle
         3. Tar Beach by Faith Ringgold

      d. Closure
         1. Round Robin processing
         2. Team discussion
         3. Choral Response
         4. Think-Pair-Share

V. Higher Order Thinking (Appendix H)
- A. Skills
  1. Categorizing
     a. Sorting Circles (Flynn, 1995)
     b. Circle Chart (Flynn, 1995)
  2. Brainstorming
     a. Simple Cluster (Flynn,1995)
     b. Complex Clusters (Flynn, 1995)
  3. Questioning
     a. Bloom's Taxonomy
     b. Fat and Skinny questions (Bellanca & Fogarty, 1991)
  4. Compare and Contrast
     a. Venn Diagrams (Bellance & Fogarty, 1991)
     b. Then/Now Graphic Organizer (Flynn, 1995)
  5. Drawing Conclusions
     a. Birthday Surprise (Rosenblatt & Schoenfield, 1985)
     b. Conclusion Sentence (Silver Burdett & Ginn)
  6. Observing
     a. Baying Like a Foghorn (Staton, 1991)
     b. A Wonderful Place (Staton, 1991)
  7. Problem-solving
     a. Adventures in Logic (Staton, 1991)
     b. Corn, Cabins and Cabbages (Staton, 1991)
  8. Sequencing
     a. Story map
     b. Direction on Rain
  9. Ranking and Prioritizing
     a. Don't Forget Your Toothbrush (Staton, 1991)
     b. Ranking Graphic Organizer (Bellanca & Fogarty, 1991)
  10. Prediction
     a. Story map
     b. Story Pattern (Flynn, 1995)
  11. Evaluating
     a. Report Card (Flynn, 1995)
     b. Look At Me! (Flynn, 1995)

VI. Post Test
- A. Groups
  1. Random selection
  2. 2-3 students in a group

- B. Activities
  1. Grades K-1
     a. Partner puzzle

b. Listening activity

2. Grades 4-6 Including Special Education
   a. Collaborating activities
   b. Brainstorm object list

C. Observation Check List
1. Derogatory language/Put-downs
2. Not on task
3. Inappropriate physical contact
4. Excessive talking out of turn

Methods of Assessment

In order to assess the effects of the intervention, a pre and post test will be given to check for appropriate social behaviors. In addition, teacher journals and checklists will be kept throughout the intervention period. The checklist will show the numbers of incidents of behavior.

From this observation we will choose our students that we will target for the intervention. The behaviors will represent a high, moderate, and low level of off task behavior. For the primary level, we will complete a cooperative learning puzzle. From the cooperative learning post test we will observe students and complete a checklist. The intermediate students will complete a cooperative lesson and show whether or not they can work together. This will be completed during the first weeks of school in order to define our observation group. At the completion of our intervention we should see more:

- On task behavior
- Appropriate verbal expression
- Taking of turns
- Group participation.

The success of the intervention will show a decrease in the number of misbehavior incidents.

Frequency and Duration Statement

Pretest activities will be given once at the beginning of the action research project. The observation check list will be completed daily from September to February. Mentors and mentees will meet once a week for a thirty minute activity. Teachers will present the peer mentoring strategies using whole group instruction. The mentors and mentees will then practice the skills in small groups. These activities will address conflict resolution, cooperative learning, and higher order thinking. Strategies and activities will be completed at least once a week for eleven weeks.. At the end of the intervention period a post test will be administered to the students.

CHAPTER 4

PROJECT RESULTS

Historical Description of the Intervention

The objective of this project was to develop interpersonal problem-solving skills. Cooperative learning, conflict resolution strategies, peer mentoring, and higher order thinking strategies were used to develop the desired changes in the performance of students.

At the beginning of September, the students completed a pretest. Assessment used for Kindergarten through first grade included listening to teacher directions and assembling a *Partner Puzzle,* found in Appendix A. The students in grades three through six listened to teacher directions and completed an activity called *Game of 26.* A sample of this game can be found in Appendix B.

An observation checklist was used to assess those targeted behaviors considered counter-productive to learning. The behaviors that were observed included: not on task, inappropriate physical contact, excessive talking, and derogatory language/put-downs. This checklist was used to document the number of each occurrence.

Cooperative learning strategies were used to teach social skills and as an instructional technique in various subject matter content. Cooperative learning was selected to encourage students to work together effectively. Sample activities to reinforce understanding of the social

skills are found in Appendix D. The social skills were introduced and taught using role playing with peer mentors. The students were placed in base groups selected by the teachers. The groups were set up in early September and were maintained throughout the month of February. Mentors and mentees met once a week for a thirty minute activity, the social skills were presented by the teacher and practiced by the students. These techniques were taught using whole group instruction and then practiced in base groups of four students. The skills chosen for base group work included: staying with the group; active listening; taking turns/sharing; keeping hands, feet, and objects to oneself; using inside voices; happy talk; resolving conflicts; and higher order thinking.

The skill that was chosen to teach first was staying with the group. On task behavior and participating with group activity helped students to process team building activities. Active listening was another skill taught to the students. This included using eye contact, head nodding, leaning forward and listening activities. Once the students were familiar with staying with the group and active listening, taking turns was introduced. Taking turns involved one person at time participating, sharing ideas and equipment, role playing and sharing activities. These activities used T-charts, partner reading and story retell. The next social skill taught was keeping hands, feet, and objects to oneself. Students role played appropriate behaviors. It was necessary for students to use self-control and be responsible for their own actions. Students were taught to use inside voices by the use of signals such as lights off, high five, finger snapping and bell ringing. Inside voices were defined to students as six inch voices, because they are sitting so close to each other all they need is a whisper voice. The last skill taught was "Happy Talk" which included using encouraging words and personal and group affirmations.

Conflict resolution training began with defining a positive classroom climate. These sessions ran from September through February. Mentors and mentees were brought together for twenty to thirty minutes once or twice a week during this time frame. Setting up ground rules and defining students rights and responsibilities was the first step in this process. Students were made aware of rewards and consequences. Dealing with conflicts was the next step students were taught. This included the definition and causes of conflicts. Also addressed were, student values and needs and how to respond to conflict. Non-violent environment strategies were taught to encourage students to be responsible for maintaining peace and resolving conflicts. Students needed to be aware of their own emotions and the emotions they expressed toward others. Students had to be aware of what non-violence is and the principles behind it.

The peer mentoring program was initiated from September through February. Students were taught modified steps in peer mediation. The peer mentoring program trained mentors in grades four through six using bonding activities. Mentors and mentees were brought together once a week for a twenty to thirty minute session. They practiced role modeling of targeted social skills. Targeted specific social skills were taught by the teacher. Students were taught to identify the problem and gather students' points of view. Once students completed these steps then they could determine compromising strategies and a resolution agreement. Children's literature for conflict resolution was read for the purpose of processing, discussion, and closure. (See Appendix G)

Higher-order thinking was broken down into several specific skills. Some of the skills using higher order thinking were categorizing, brainstorming, sequencing, prediction, and drawing conclusions. Sample activities and complete peer mentoring steps can be found in Appendix F.

The posttest was administered at the end of February. For the posttest, students were placed in base groups at random. The same activities as used in September were completed by groups for the purpose of noting changes in the social skills. The observation checklist was one of the instruments used in this evaluation. This was augmented by qualitative notes from the teachers' journals.

In order to assess the effect of interpersonal problem-solving skills on students behavior, a daily observation checklist was sustained throughout the intervention. Teachers collected data from teacher journal entries, student surveys and the observation checklist. Table 2, represents a summary of the data compiled from September through February. This data shows the exact number of incidents of targeted behaviors.

Table 2

Categories and Numbers of Incidents of Targeted Behaviors by Month and Grade Level

	Special Needs						Reading						Kindergarten						1st Grade					
	Sep	Oct	Nov	Dec	Jan	Feb	Sep	Oct	Nov	Dec	Jan	Feb	Sep	Oct	Nov	Dec	Jan	Feb	Sep	Oct	Nov	Dec	Jan	Feb
Not on Task	**93**	**70**	**35**	**39**	**41**	**34**	**74**	**212**	**147**	**97**	**68**	**75**	**57**	**218**	**58**	**46**	**71**	**95**	**63**	**208**	**176**	**161**	**134**	**130**
Inappropriate Physical Contact	**13**	**18**	**7**	**8**	**10**	**12**	**7**	**8**	**6**	**8**	**9**	**6**	**18**	**33**	**17**	**10**	**25**	**30**	**31**	**35**	**18**	**15**	**4**	**12**
Excessive Talking	**89**	**38**	**28**	**70**	**50**	**43**	**15**	**69**	**55**	**20**	**26**	**30**	**50**	**213**	**60**	**72**	**91**	**74**	**26**	**193**	**184**	**181**	**133**	**142**
Derogatory Language/Put Downs	**8**	**18**	**10**	**16**	**12**	**10**	**4**	**16**	**5**	**3**	**2**	**3**	**10**	**13**	**6**	**7**	**15**	**15**	**39**	**27**	**26**	**15**	**10**	**13**

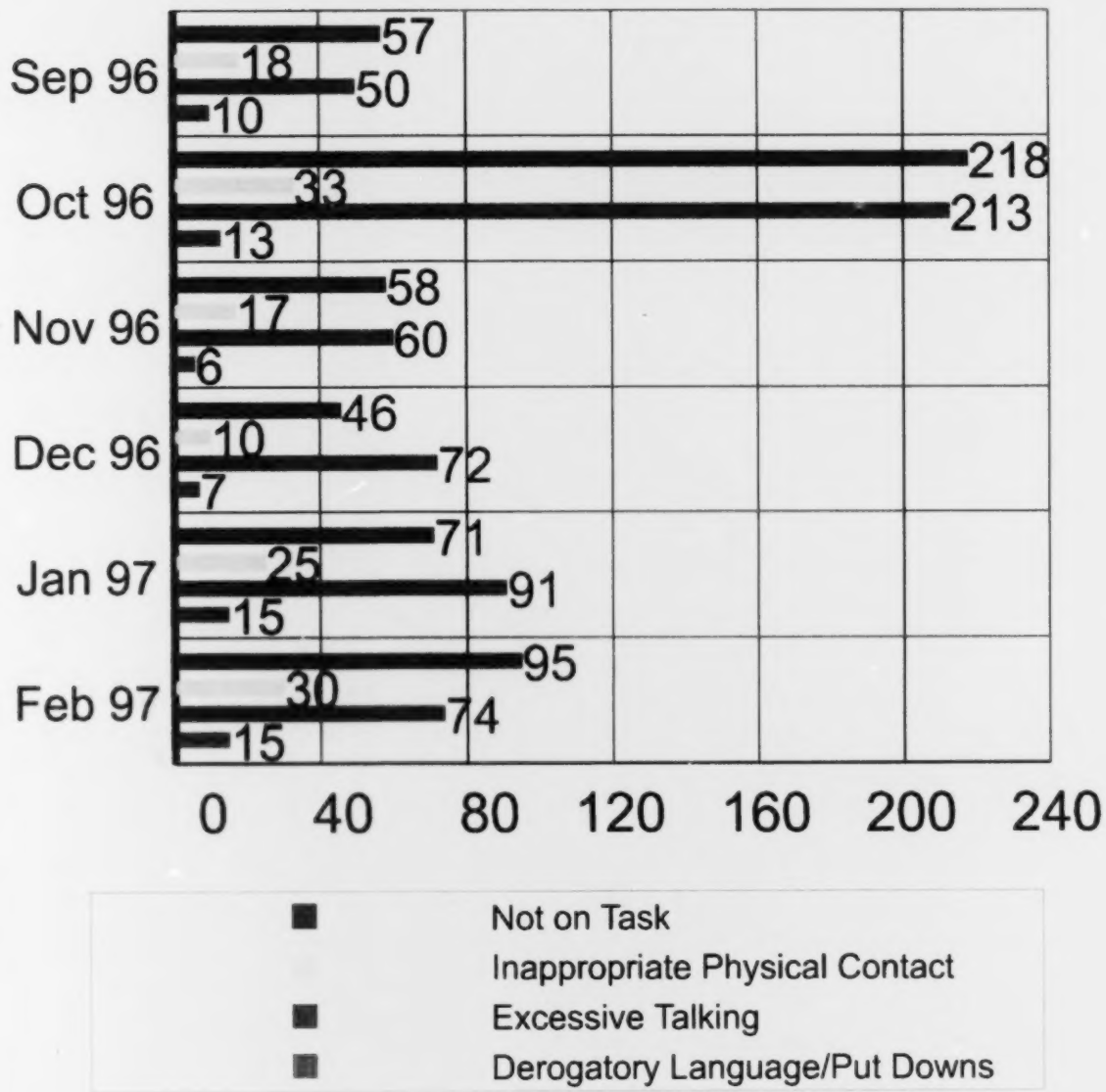

Figure 3 Number of Incidents of Targeted Behaviors for the Kindergarten Class from September, 1996 through February, 1997

Six months after the beginning of the intervention, the highest number of incidents in the

kindergarten classroom continued to be excessive talking and off-task behavior. The lowest number of occurrences was derogatory language/put downs. These numbers do not show an increase over the six month period of intervention. When comparing the month of October to the month of February, not on task behavior, inappropriate physical contact, and excessive talking showed a decrease. During the month of October the number of incidents increased, compared to September, in excessive talking and not on-task behavior. This increase could have been because the teacher and students became aware of each other, "the honeymoon was over", and also because the teacher became a better record keeper. The researcher's journal indicated that in the month of October, students continued to need more teacher direction, as they had a hard time maintaining and returning to the task. Excessive talking had a 66% decrease from October to February. The students in the kindergarten classroom had high incidents of off-task behavior, excessive talking, derogatory language/put downs and inappropriate physical contact in October and then there was a decrease until after December. Students became more aware of the social skills that were being taught as they began to raise their hands and take turns when they wanted to share their ideas. As I introduced the students to the concept of higher order thinking, many students were able to share ideas as well as think beyond what was asked. Some students have a hard time keeping quiet, so they often miss the introduction to the question. The number of total incidents remained consistent for all categories until December. The numbers in December and January were higher than that of previous months. This increase in occurrences could have been because of the holiday season and the amount of bad weather that we were having. This would make the students very restless because they were unable to go outside during recess. Teacher journal entries indicated that students did not want to be at school in January. The winter break

made them miss being at home because the classroom was a place with too much structure. Regrouping was done in January. Journal observations showed that the students spent a lot of down time in January working on developing their social skills of listening, taking turns, keeping their hands/feet to themselves and following directions. A lot of re-teaching needed to be done. Numbers showed that the number of incidents for excessive talking decreased in February, but off-task behavior and inappropriate physical contact increased, while the number of derogatory language incidents remained the same.

The number of inappropriate physical contact incidents remained consistent during the six month intervention. In the month of October the highest number of incidents for inappropriate physical contact occurred. The numbers decreased until after the holiday in December when the numbers reached their highest. October had the highest number of incidents at 477 compared to the lowest months of September and December. These months had a total of 135 incidents each. January and February had a combined average of 208 occurrences. Even though this number was lower than October, the teacher journal and the checklist noted that excessive talking was occurring frequently with a combined number of 165 occurrences. November had 141 incidents reported with only 6 of them dealing with derogatory language/put downs. Journal notation indicated that in November students were working on using their inside voices, but the amount of inappropriate physical contact was occurring frequently. Students seem to be aware of what an inside voice is and when to use this quiet voice, but at the kindergarten age level, they can't keep quiet for a long period of time. When looking at the number of incidents of inappropriate physical contact on the chart it shows the number of occurrences did decrease from October to November and continued to decrease until the month of January.

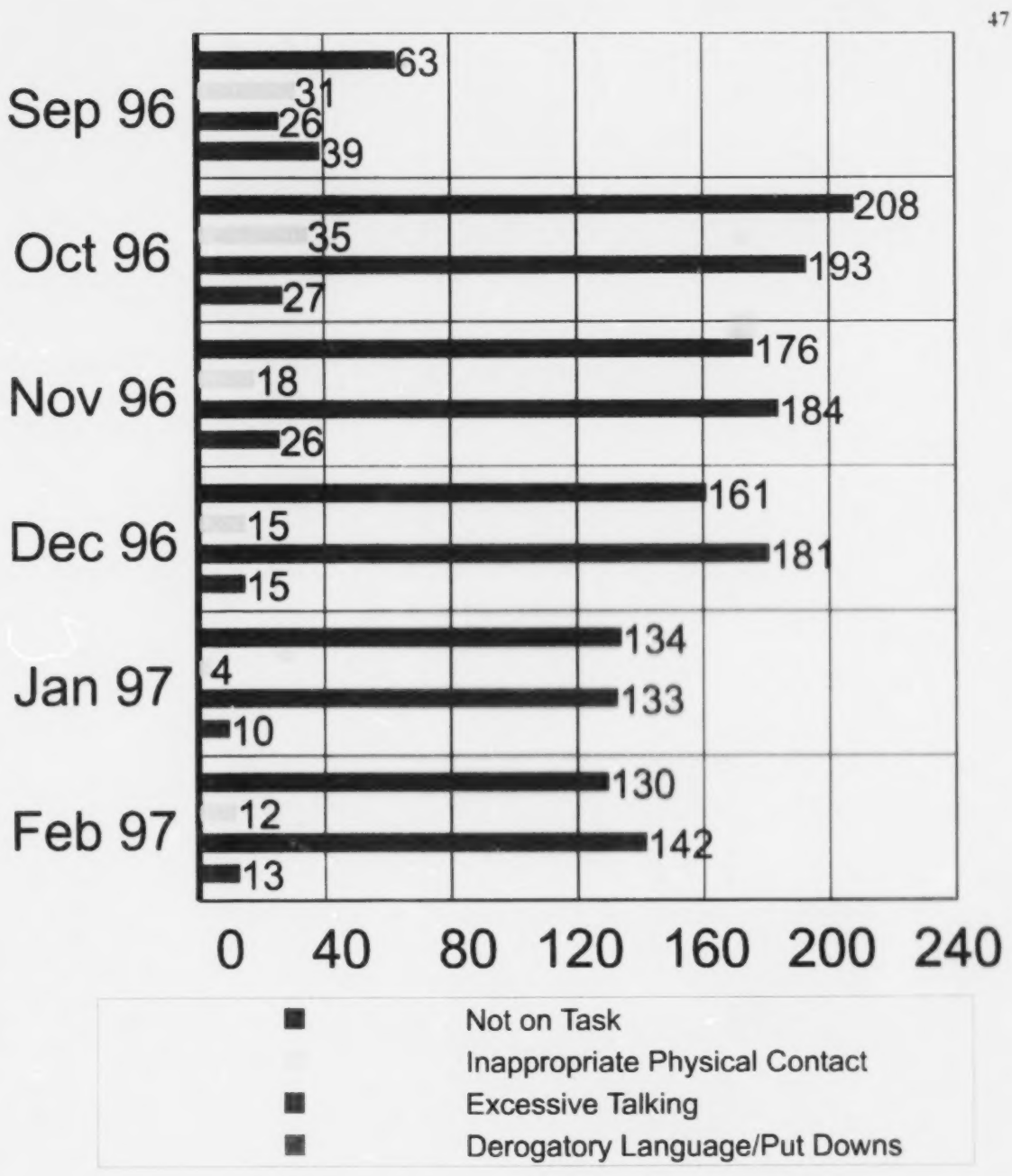

Figure 4 Number of Incidents of Targeted Behaviors for the 1st Grade from September, 1996 through February, 1997

In the first grade, the biggest problem from September through February was students not being on-task. Almost 45% of the behaviors dealt with students being off-task, followed closely by excessive talking. Inappropriate physical contact and derogatory language combined, made up 12% of the behaviors.

By October the numbers suggest the students were more comfortable in the classroom, and their former negative behavior patterns were becoming more apparent. The researchers journal noted a change in the checklist, making it easier to keep track of behaviors. According to collected data, repeatedly it was the same five students who were causing most of the behavior problems. The observed behaviors were: not on task, excessive talking, inappropriate physical contact, and derogatory language/put downs. September had the lowest number of over all incidents, and October had the highest. There was a steady decrease in these negative behaviors from October through February. For example, there was a 67% decrease in inappropriate physical contact from October to February. Clearly, once the intervention was in place, it had a positive effect on a majority of the students. From November to December there was not a significant decrease in behaviors. This could possibly be due to the teacher being absent from school for a week.

The behaviors of not being on task and excessive talking were consistently the most frequently observed by the teacher. Interestingly, inappropriate physical contact and derogatory language are much more objective behaviors and therefore, more easily noted.

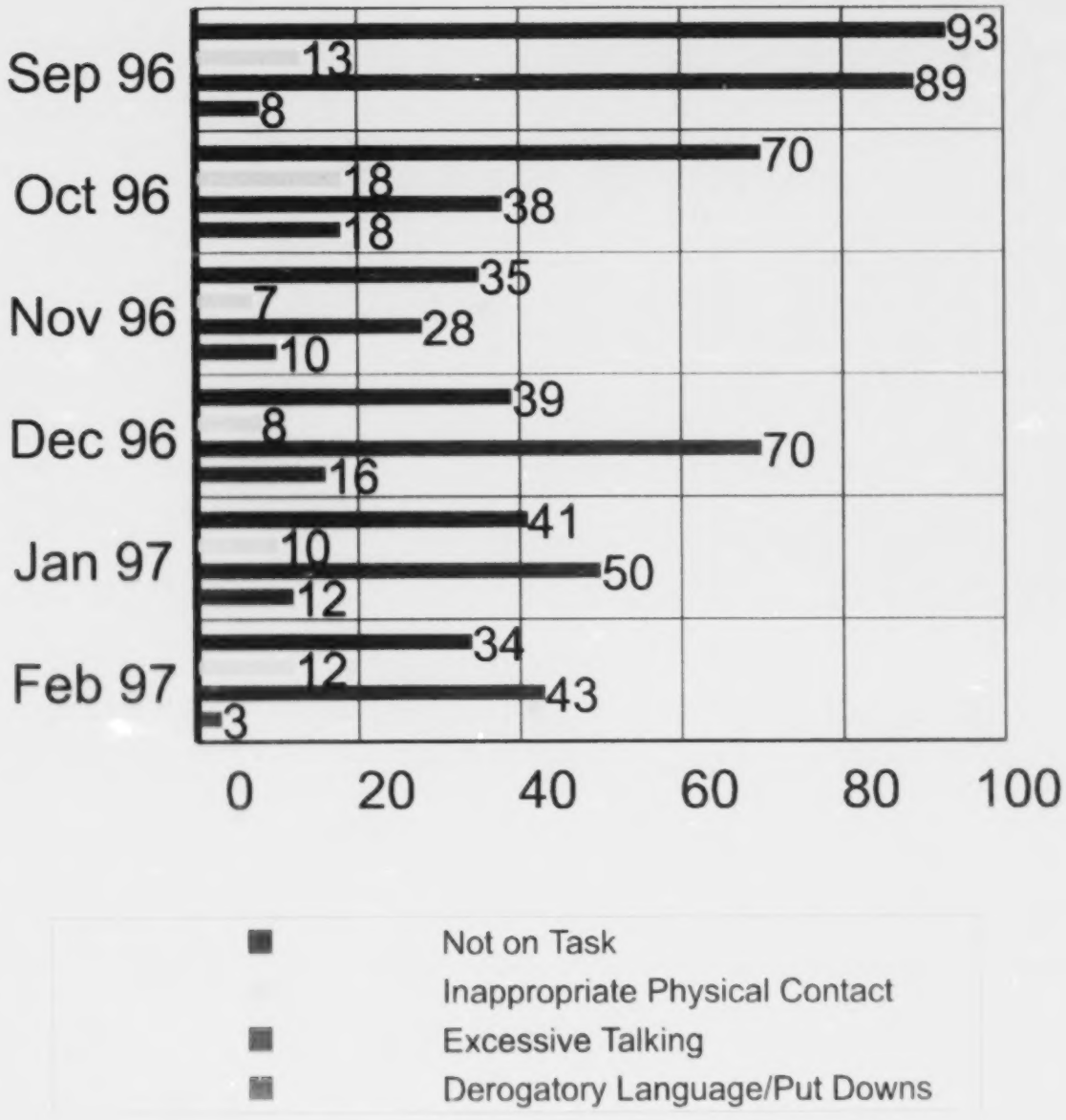

Figure 5 Number of Incidents of Targeted Behaviors for the Special Needs from September, 1996 through February, 1997

In the special needs classroom, the lowest number of incidents were in the area of inappropriate physical contact. The highest number of incidents were in the area of excessive talking. In the area of not being on task, the incidents declined drastically. Students not being on task in the first few months was noted. These number of incidents declined as the period of intervention progressed. The month of September showed an incident rate of 93. At the conclusion of the intervention period, the rate dropped to a 34 incidents. This is a decline of one-half. Students' on-task behavior may be attributed to the use of active listening skills, introduced at the beginning of the project. Students' use of higher order thinking skills may be related to a decline in the number of inappropriate behaviors. Students were more apt to problem solve and have more confidence in their abilities. Inappropriate physical contact remained at an almost constant low rate of occurrence through the intervention period. These incidents began in September with a rate of 13; the month of October had a rate of 18. Over the next three months there was a steady decline of occurrence, until in February there was only 12 incidents.

Students were given challenging subject matter and more projects employing the seven intelligences. Students are now better able to stay on task. There was a 63% decrease in not on task behavior from September to February. The teacher used the arts throughout the curriculum which could have helped to curtail the excessive talking. Derogatory language and put downs were the second lowest area of concern addressed. The rate of incidents remained about the same. The month of September showed an incident rate of 8 and ended in February with 10 incidents. According to the teacher's daily journal and checklist, only a few students continued to exhibit inappropriate physical contact. It can be concluded that some students made a great improvement in these areas. However, some still demonstrate problems in various areas. The

daily checklist and teacher notes indicate that when the day was started with a "personal greeting", a simple smile, a little compliment, it set the mood for less off task behavior, put downs and derogatory language.

The teacher has gotten several comments from the building principal, parents and staff commenting on the drastic change in her classroom. The teacher has had several parents visit her classroom and indicate they were pleased with their child's improved behavior. Several notes have been received from parents, praising their child's positive outlook on academics and behavior. Students have been heard giving compliments and helping others more. The reader needs to understand this was based upon teacher observation and judgment.

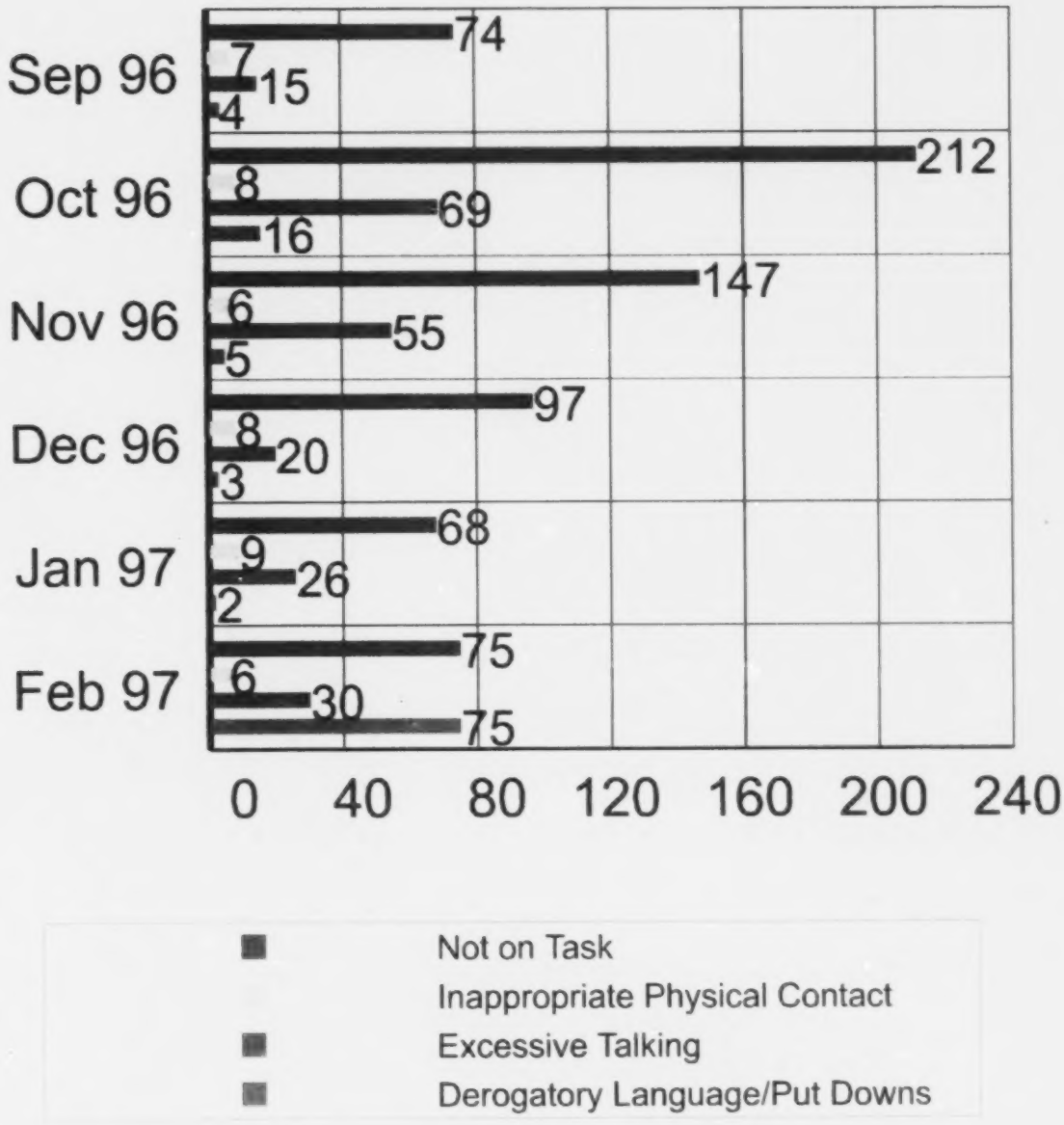

Figure 6 Number of Incidents of Targeted Behaviors for the Reading Class from September, 1996 through February, 1997

The intervention in the reading classroom was for a ninety minute time period, five days a week. The most prevalent of the targeted behaviors included not on task behavior followed by excessive talking. The behavior with the smallest number of incidents was derogatory language/put downs.

September might be called the "honeymoon stage" since the number of inappropriate incidents were low. This could perhaps be attributed to the fact that in the beginning of the year everything is new. Learning teacher's procedures, expectations and becoming comfortable in the classroom environment all play a part in causing children to use more self-control in the beginning of the year. The form used to record data was changed, making it easier to record the tallies of increased incident rates. Also, data was only collected for three out of the four weeks in the month of September.

In October, the number of incidents increased sharply with the exception of inappropriate physical contact. Not on task behavior incidents rose from 74 to 212, while inappropriate physical contact only increased by one incident. Excessive talking jumped from 15 occurrences to 69. After October, the number of not on task and excessive talking incidents continued to decline with the exception of February where there was a slight increase of seven incidents for not on task and 4 incidents for excessive talking. During this time cooperative learning was being implemented on a regular basis. The students were learning new strategies in how to work as a group and become responsible team mates. The students had not yet learned the necessary social skills needed to be working in cooperative groups. These factors caused the increased number of incidents. The "honeymoon" was over.

The intervention appears to have had very little, or no effect, on the inappropriate physical

contact during the intervention period. This possibly can be attributed to the fact that some children will engage in inappropriate physical contact whether the classroom environment is structured or not. Another factor is the number of incidents showed little fluctuation throughout the intervention, implying the behavior was at its baseline already. Teacher values may have played a role in the low number of incidents because of the researcher's intolerance for disrespect. This possibly could explain the lower number of incidents in inappropriate physical contacts and derogatory language/put downs.

After a three month time period the number of incidents in the category of not being on task, excessive talking and derogatory language/put downs decreased. Derogatory language had an 82% decrease from October to February. This suggests that the intervention had a positive effect on these three behaviors both quantitatively and qualitatively.

Inappropriate physical contact was less frequent to begin with and one might assume it was already at its baseline number. The lower the number of incidents, the harder it is to change the behavior. A longer time period, continued high teacher expectations, conflict strategies being perfected and more maturity in student behavior, could have reduced the number of inappropriate physical contacts.

Presentation and Analysis of Results

Based on the presentation and analysis of the data on developing interpersonal problem-solving skills the students showed a qualitative and quantitative improvement in behavior. The use of social skills taught during conflict resolution sessions appear to have transferred to cause mature and appropriate interpersonal behavior. Researchers found this decreased the amount of time spent solving students' disputes and problems during direct instruction and student practice

time. Researchers felt students' time-on-task was increased, as well as academic growth. Students are now able to use problem-solving skills to work out their own conflicts with each other.

The use of cooperative learning task groups and the influence of peer pressure to perform, may have influenced students' desire to comply positively. Students were given "pressure" from their teammates to be personally accountable for their share of the work. Students' use of higher order thinking, can be noticed across the curriculum in 3 out of the 4 classrooms. Skills taught in task groups have instilled in students the ability to become more verbal and less critical of others. Examples of this include the students' ability to stand in front of the class to share their work; be able to receive praise and constructive suggestions graciously; and they learned to criticize the idea not the person.

During social skill lessons students are encouraged to do role-playing, which has helped to enhance conflict resolution integration methods. As students worked through the six month intervention period, task groups were observed that showed positive relationships being created. As students bonded, they began to give praise to themselves and encourage other teammates. This kind of behavior was not exhibited when the researchers began. A genuine growing concern for each other began. The researchers felt that the intervention period was not long enough. More time was needed to see a further reduction in inappropriate behavior in the classroom environment.

Researchers felt the teaching of conflict resolution was like having another subject to teach. There was not enough time to teach the methodology of particular lessons. Researchers felt that the check list must be user friendly. We found tallying the behavior incidents was the easiest

method. The pre and post test should address multiple-targeted social skills.

It can be concluded that in all four classrooms, the targeted behaviors were making the classroom climate more positive and productive. In two of the classrooms off-task behaviors were the most common inappropriate incidents. In two other classrooms excessive talking was the most common inappropriate occurrence. These two behaviors were prevalent in all four classrooms. When collecting data on the behaviors that occurred less frequently, two classrooms had a low incident rate of inappropriate physical contact. The remaining two classrooms noted that derogatory language/put-downs had the least number of incidents throughout the intervention. All four of the researchers' journals indicated that the amount of time spent on teaching social skills and conflict resolution increased throughout the intervention. The new skills that the students acquired are integrated into all four of the researchers' classrooms.

Conclusions and Recommendations

Based upon the intervention, the results would suggest that the use of conflict resolution can be a positive means to problem solving. Through the use of conflict resolution, a more peaceful classroom climate was created. The task groups developed out different leadership skills such as encouraging team members to use self control. The students we able to set meaningful goals. The process whereby the intermediate students bounded with the primary students was a positive experience for both the mentor and the mentee.

The researchers would encourage the use of conflict resolution, problem solving, higher order thinking, and cooperative learning to be used throughout the school year. It is the researchers' belief that students will be better prepared for academia and their future work place, if the aforementioned are integrated into the classroom environment.

It was noted that students became more aware of the necessary social skills. For example, they used happy talk and inside voices more often. For the majority of the students there has been an overall improvement in inappropriate behavior. We saw students using higher order thinking skills, fat questions and paraphrasing what others said.

The use of social skills taught during conflict resolution sessions, has led to more appropriate interpersonal behavior among the students. Teachers found this decreased the amount of time spent solving students' disputes and problems during direct instruction time. Researchers felt students' time on task was increased, as well as their academic growth. Students now have a higher degree of success in solving conflicts with each other.

The use of cooperative learning task groups and the influence of peer pressure to perform appropriately, may have encouraged students to comply more positively. Students were given "pressure" from their teams to be personally accountable for their share of the group's work effort. Students' use of higher order thinking, can be noticed across the curriculum, in three of the four classrooms.

The skills taught in task groups have instilled in students the ability to become more verbal, be more comfortable presenting in front of the class, and be better able to give oral presentations. During the teaching of social skills students were encouraged to do role playing, which has helped to enhance conflict resolution lessons. As students worked through the six month period of intervention, it was observed that they were creating more positive relationships.

As students bonded, they began to give "praise" to themselves and encourage other teams. This type of behavior was not exhibited when the research began. A genuine concern for each other began to grow.

The researchers felt the intervention period was not long enough. It was felt more time was needed to see a reduction in inappropriate behavior in the classroom environment. Researchers felt the teaching of conflict resolution required more time in the daily schedule, which made teachers feel they were having to teach another subject. There was not enough time to teach the methodology of particular lessons.

The researchers felt that the checklist should be "user friendly". Researchers found tallying behavior incidents was the easiest method. The pre and posttest should address multiple targeted social skills. Overall, the researchers agreed this intervention was well worth the expended time and effort.

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APPENDICES

Appendix A

Samples of questions

Student Survey

1. Did you like working together?

2. Was your group using inside voices?

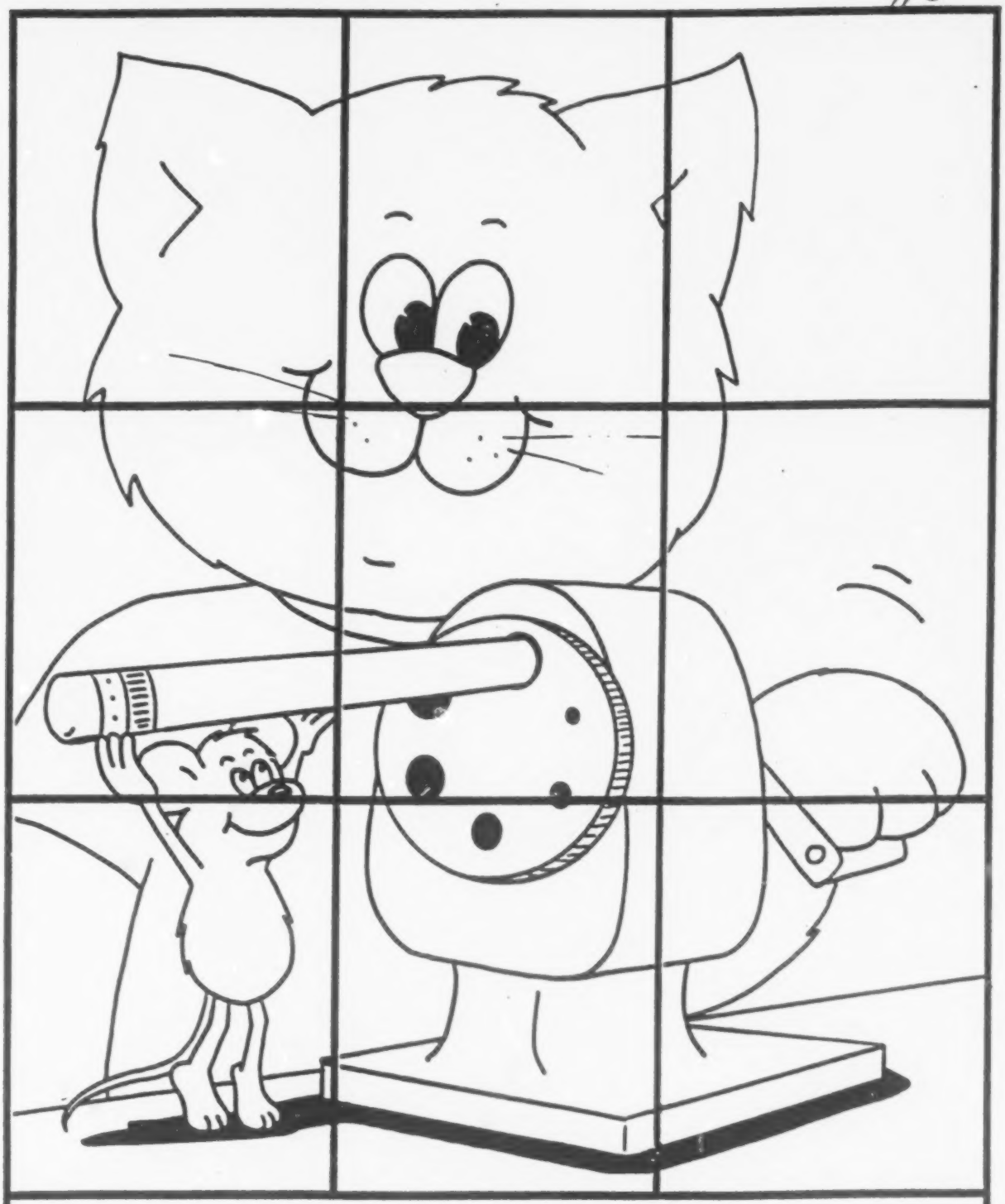
3. Was there "Happy Talk" used?

4. Did each group member have a turn?

5. Was there any hitting, kicking, or pushing done in your group?

6. Did you enjoy this activity?

Partner Puzzle



Cooperation gets the job done.

GAME OF 26

Here are pictures of twenty-six items —one for each letter of the alphabet. Think of these pictures as raw material to be molded into any activity you like. The following are some ideas of what can be done with these pictures.

Object: Development of observation and memory skills

Procedures:

1. Have students study the pictures for one minute. Then have them write down as many items as they can remember (without looking at the pictures, of course). Present this activity as an experiment, and explain to the class that peeking at the pictures will interfere with the results. If you use an opaque projector, the problem of peeking will be solved!
2. Have the students repeat the above process, adding any pictures that they can remember after the second viewing.
3. Perhaps now go over all the pictures with the class to be sure that all students have the same word identification for each picture.
4. Again, have students, without looking at the pictures, write down items in the pictures that begin with any random letters, for example, *w, a, s, m, q*.
5. Have students repeat the first step described, and see if they can now remember all twenty-six items.
6. Have students take turns listing the items orally in alphabetical order. Each student has a turn and lists one. Do this individually or in teams.

Object: Development of observation of position and spatial relations

Procedures:

1. Have students put the pictures away, and ask them to describe the positions of the pictures. Which appeared in the lower left corner, the upper left corner, etc.? You may ask for answers out loud and write them on the board. Once all the positions are named, check back with the picture page. The comparison between what is remembered and what is real should be interesting! Are some students particularly good at remembering the positions of items?
2. Another way of practicing the observing of spatial relations is to ask students whether a particular drawing is at the top, the middle, the bottom, the left, and so forth of the page. For example, where is the rabbit? the giraffe? You should ask about five to ten items. Again, have the students write their own responses, or solicit answers and write them on the board.
3. Another question series in a similar vein involves asking which picture is on top of another one, next to another, or below another.

Object: Sharpening of categorizing and ordering skills

Procedure: Have the class categorize the twenty-six items in as many possible ways as they can. This activity can best be done in small groups. Have the class divide into teams of three to five members each. Have each team select a representative. Eventually, he will present the team's results to the entire class.

The team's task is to classify the pictured items in all conceivable ways. They can use any and all possible reference points. Categories may refer to the function of the item, its size, whether or not it is alive, its material composition, makeup of the word itself (number of letters, syllables), and the usefulness and popularity of the item. Let students use whatever reference materials are available in the classroom. The only criterion is that any category listed must contain at least two pictured items to qualify as a category.

Ten minutes or so before the period ends, have the representatives present their results. One point is given for each category mentioned, and one extra point for each category that no other team mentioned.

Note: If the class has difficulty getting started, give students some hints. Explain some of the possible categories, as given above.

Object: Sharpening of sentence and story writing skills.

Procedure: Students may use the pictures as the basis for writing sentences or stories. Have them write sentences using as many of these words as possible. Sentences, stories, or poems should be clever, funny, newsworthy, dramatic, or any other category the class and teacher may choose. After fifteen minutes or so, ask for volunteers to read their material. Have the class react to them, and perhaps select the ones that best fit each category.

Here is the alphabetical listing of the items in the pictures.

apple	giraffe	moon	star	Yo-Yo
balloon	hand	nest	tent	zebra
cards	iron	octopus	umbrella	
door	jacks	parachute	violin	
envelope	kite	quarter	watermelon	
fish	lamp	rabbit	xylophone	

GAME OF 26

OBSERVATION CHECKLIST

Targeted Behavior	Not on task	Inappropriate Physical Contact	Excessive talking out of turn	Derogatory Language Put-downs

Appendix C
Observational Checklist

77

76

Formations

Heads Together

1. Team members in each group have letters, numbers or words (uno, duo, tres, quatro..; a, b, c, d; verbs, adjectives, nouns, pronouns...). Have fun with this - connect the strategy to the content!
2. Challenge the groups with an assignment, a question or a problem to solve.
   "In what ways does a collaborative character map organize ideas and form a basis for writing an essay?"
3. Students work together to answer the question.
   "Put your heads together! Everyone needs to understand and agree on the answer or solution."
4. Choose a number, letter or word.
5. Students with that number, letter or word reply.

You can call on only one person with the number, letter or word to respond or call on all the students with the number, etc. to respond simultaneously.

Team Work

1. Students work in a group to attain a goal.
   "Write a supporting sentence that explains, describes or expands this topic sentence."
2. Each team member contributes.
3. All groups share with the whole class.

Pairs Check

1. Match up students within a team of four, six and so on.
2. Pairs help each other to solve a problem, answer a question, edit, revise, etc. One partner might even coach.
   "Respond to each other's papers by discussing what you like, don't like, problems with grammar, spelling. format, etc."
3. Then, pairs within the teams check and share.

Team Up

1. Pair up teams (partners, triads, quads and so on).
2. Each set of teams share their answers, solutions, ideas and projects.

"After making up a sentence using this analogy - famine: starvation; deluge: flood, share it with the other team. Judge which team's sentence communicates the analogy most effectively."

Concentric Circles

1. Every student shares an idea, opinion, answer with all of the group members.

"Capitalization and punctuation help the reader with the nuances of a passage. They signal different structures and inflections, too."

Siskel & Ebert

1. In pairs, students interview each other, alternating roles.

"How does using a different colored pen or pencil help you with your editing?"

2. Each student shares the information gleaned from the interview with the whole class.

Think - Pair - Share

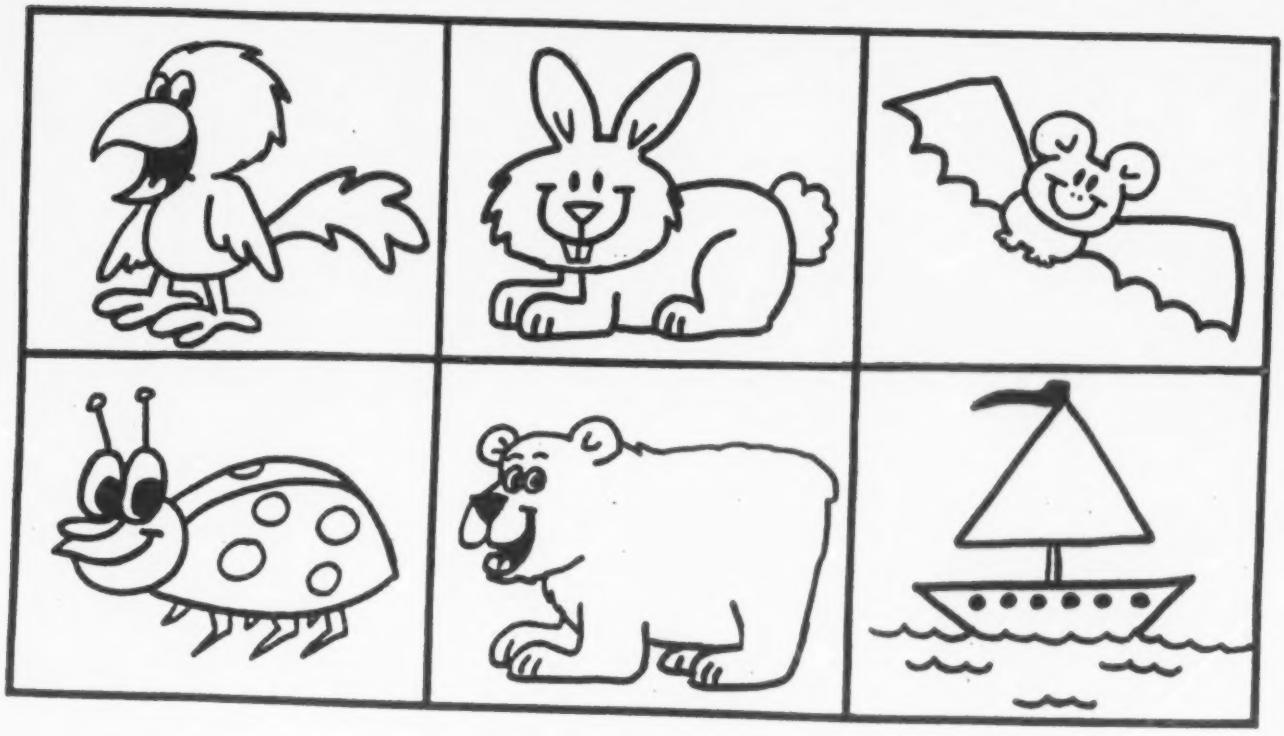
1. Pose a question or a problem to the whole class.

"Write a different ending for the story."

2. Encourage students to think! Give them wait time.
3. Individuals find partners.

"Explain your ideas to each other. Summarize important points with your partner. Tell your partner what you think. Compare your answer with your partner's."

Name_____



- ☐ Make the bug red and green.
- ☐ Color the bird blue and yellow.
- ☐ Make the bunny brown with pink ears.
- ☐ Color the bat all light brown.
- ☐ Make the boat blue and red.
- ☐ Put a big black **X** on the bear.

Lesson Example 1: Mac-A-Lena

TARGETED INTELLIGENCE: Musical/Rhythmic

SUPPORTING INTELLIGENCES: Verbal/Linguistic, Visual/Spatial, Intrapersonal, Logical/Mathematical, Interpersonal

THINKING SKILLS: Following Directions, Sequencing

SOCIAL SKILLS: Communication, Listening, Accepting Self and Others

CONTENT FOCUS: Parts of the body

MATERIALS: Large piece of newsprint, one dark marker

TASK FOCUS: This is a shared drawing. The partners will take turns drawing their part as each verse of the song is sung. They must accept the drawing of the partner and not correct, adjust, or fix it in any way. At the end they will have completed the picture of Mac-A-Lena.

PRODUCT: A picture of Mac-A-Lena

PROBLEM: To draw a picture from a song

ACTIVITY:

1. Divide students into pairs. Name one Student A and the other Student B.
2. Student A gets a large piece of newsprint and B gets a dark marker.
3. Give these directions:
   a. Place the paper lengthwise between the partners.
   b. When a verse is sung, A draws the body part in the song.
   c. All students join in the chorus.
   d. Give the marker to B to draw during the next verse.
4. Make the students aware of the rules.
   a. No body part is to be drawn unless it is sung about.
   b. Swap the marker each time.
   c. When the drawing is complete, put Mac-A-Lena in the habitat or setting of the current unit of study.
   d. Both partners must sign the shared drawing.

REFLECTIONS:

1. What was it like to share the drawing of a picture?
2. Is it easy for you to draw from a song? Why or why not?

Lesson Example 3: The Beat Goes On

TARGETED INTELLIGENCE: Musical/Rhythmic
SUPPORTING INTELLIGENCES: Bodily/Kinesthetic, Intrapersonal
THINKING SKILLS: Analysis, Awareness of Different Beats
SOCIAL SKILL: Moving in synchronicity
CONTENT FOCUS: Music rhythms
MATERIALS: Audiotape with different types of music with varying beats, streamers for each child
TASK FOCUS: Students will move to the varying rhythms and beats. They will each make their streamers move to the beat.
PRODUCT: A streamer parade
PROBLEM: Dancing to a rhythm

ACTIVITY:

1. Assign each student a personal space.
2. Play the tape and instruct students to move streamers to the beat. Demonstrate.
3. Add additional body movements to this activity if desired.
4. Have a streamer parade.

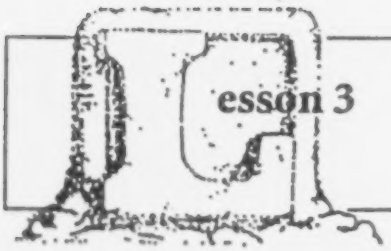
REFLECTIONS:

1. How comfortable did you feel doing this activity?
2. What made you uncomfortable? Why do you think so?

PRIMARY SCHOOL EXAMPLE: Have a parade of streamers that move to the changing songs and rhythms.

MIDDLE SCHOOL EXAMPLE: Have students create drum beats. Let them choose objects that make a drum beat: two sticks, two spoons, pencil on desk, etc. Play the musical tape.

HIGH SCHOOL EXAMPLE: After studying various types of instruments, form pairs. Each pair will choose one object to create the beat. Rotate to new partners for a new sound. Each keeps his or her original object.



Lesson 3 Sharing Shields

Classbuilding
• *Getting Acquainted*

Lesson-At-A-Glance

Goal: Classbuilding (Getting Acquainted)
Grades: 3-Adult
Time: 15-30 Minutes

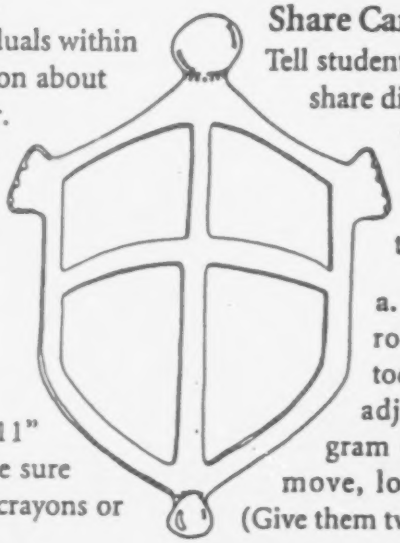
Outcomes — Students Will:
- Share information about themselves.
- Become better acquainted.
- Share feelings.
- Actively listen in small and large group settings

Materials:
- Copy of the Shield on 8 1/2" by 11" paper or blank 5" x 7" card for each student and a pencil
- Reflection questions on board, overhead, or ditto
- Posted affirmation starters
- Shield Handout
- Pencils or colored crayons or markers

Structures:
- **Roundrobin**
- **Three-Step Interview**

Lesson Overview

This is an opportunity for individuals within the classroom to share information about themselves in a safe manner. They will write and share personal information they are willing to reveal to others.



Lesson Sequence

Teacher Talk:

Explain the Task

Hand out either the 8 1/2" X 11" shield, or 5 x 7 card. Check to be sure all students have pencils, colored crayons or markers.

Directions for What to Write, Demonstration

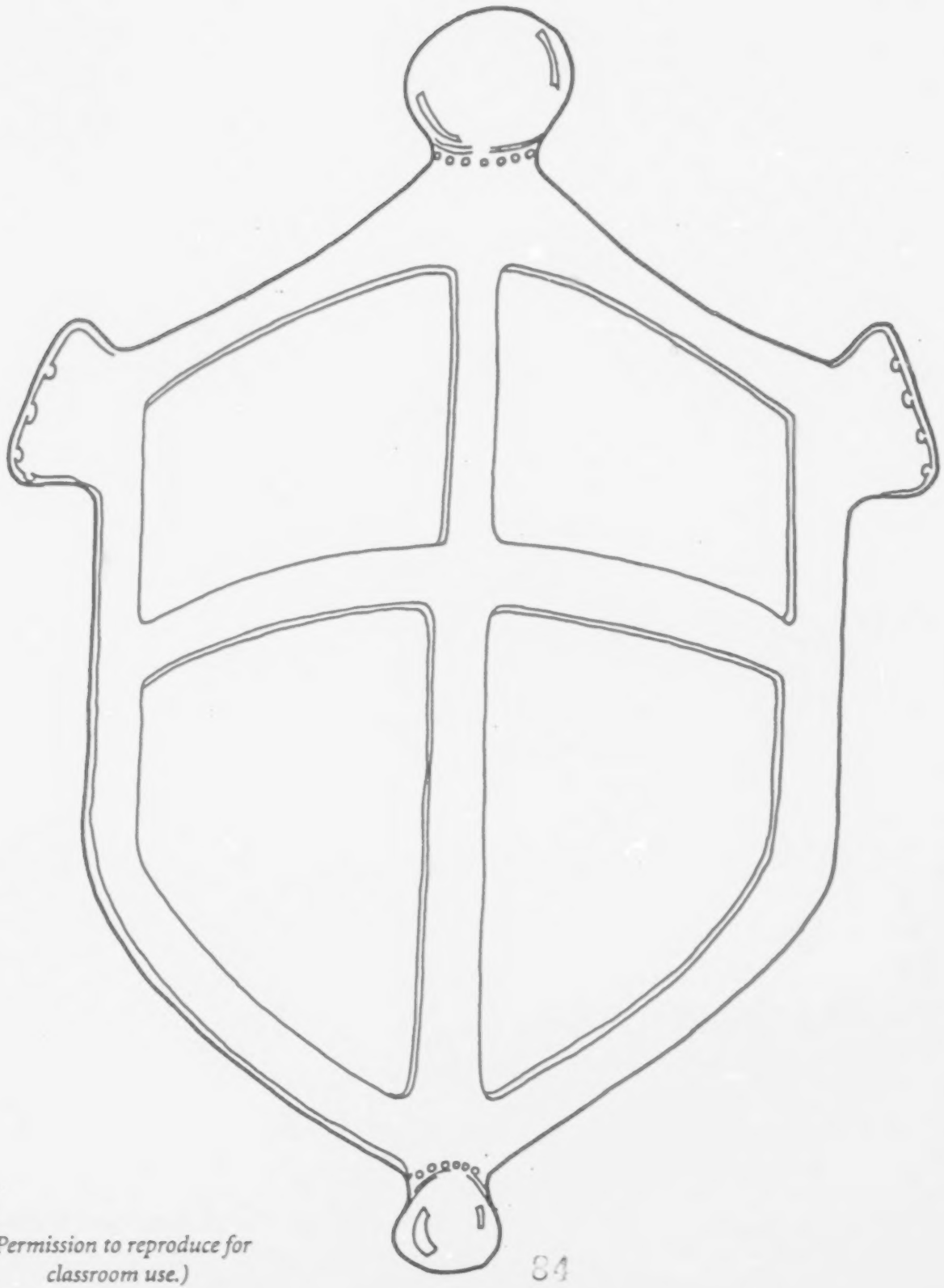
Middle: In the middle band of the shield students are to write a positive adjective in front of their first name. Give an example. I use Valiant Vanston. Tell students "If you get stuck, ask a neighbor for help."
Upper Left Corner: Write or draw your favorite TV program.
Upper Right Corner: Write the name or draw a picture of your favorite sport or game.
Lower Left Corner: Write or draw what you enjoy doing the most in the summer.
Lower Right Corner: Write or draw what you would like most to learn in school this year.

Random Team Formation or Mix-Freeze-Group:

Share Cards

Tell students they will use Roundrobin to share different parts of their shields as you give them directions. They are to stay with their partners, until you give them the signal to switch.

a. Pairs: Find a partner in the room you haven't talked with today and share your alliterative adjective and favorite TV program (upper left corner). Students move, locate a partner, and share. (Give them two minutes to share.)



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b. **Triads:** Find two new partners and tell your name and favorite sport or game (upper right corner).

c. **Groups:** Find three new partners (group of four), and tell your name and what you enjoy doing most in the summer (the lower left corner).

d. **Groups:** Find three new partners (another group of four). Share what you would like most to do in school this year (the lower right corner).

Variations

Other ideas for shields: favorite colors, numbers, car, movie, sports team, movie star, teacher, subject, vacation; or their goal for the week, month, semester, career.

Reflections & Affirmations

Three-Step Interview:

Reflections

Have the reflection questions on the board, overhead, or ditto. Direct students to answer the questions within the last group of four. They are to answer the questions using a Three-Step Interviewing procedure.

Step 1. Person one in each pair asks their partner one of the questions; partner answers.

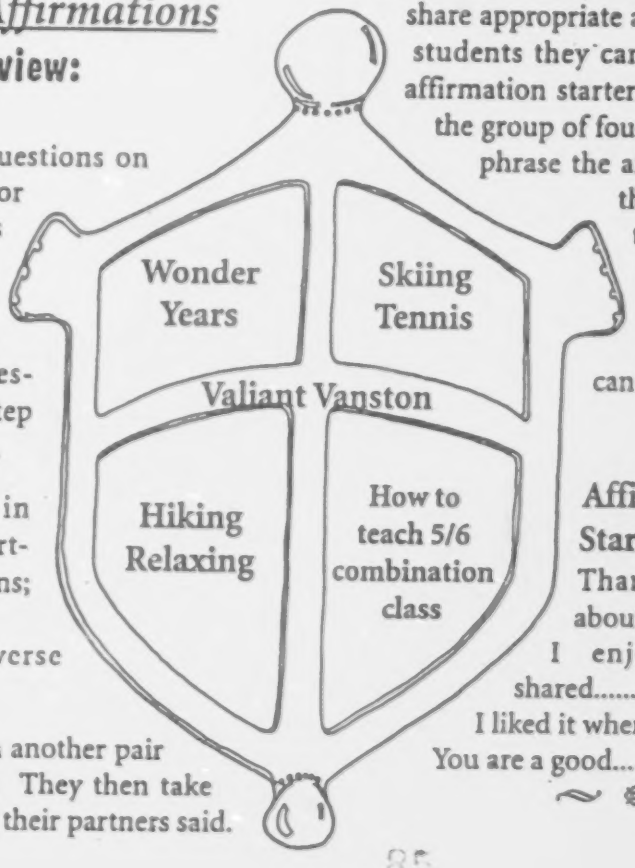
Step 2. Partners reverse roles.

Step 3. Pairs team up in another pair to form groups of four. They then take turns paraphrasing what their partners said.

- What kinds of new information did you find out about each other?
- Was this lesson fun? If so, what made it enjoyable?
- Was it more difficult to share in your first group or last? Why?
- How could you have changed anything you've written on your card?
- What would it be like to make a family shield at home?

Roundrobin: Affirmations (Done with last group)

Ask students in the last group to think about affirmations they might give the members in this group. Have students Roundrobin to share appropriate affirmations. Remind students they can refer to the posted affirmation starters if they need to. In the group of four, have partners paraphrase the affirmation starters to the other members of their group. Remind those who receive affirmations that their only response can be "Thank you."



Affirmation Starters:

Thank you for sharing about.....

I enjoyed when you shared.....

I liked it when.....

You are a good.....

No, stupid! That's not right.	***You don't know anything.***
You are going to make us get an "F."	***Dummy, you are wrong.***
You don't know how to do anything!	***Don't listen to his crazy idea.***
You never get it right.	***You always mess up.***

8 Modes of Conflict Resolution STOP HACC

Share

Humor

Take Turns

Avoid

Outside Help

Compro-mise

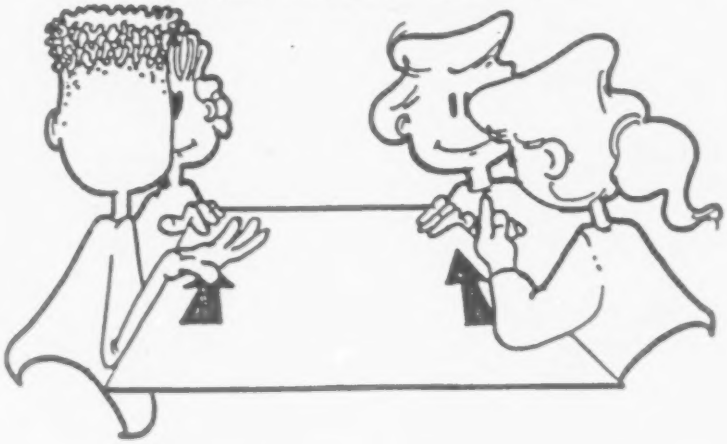
Postpone

Chance

Available as a poster from Kagan Cooperative Learning

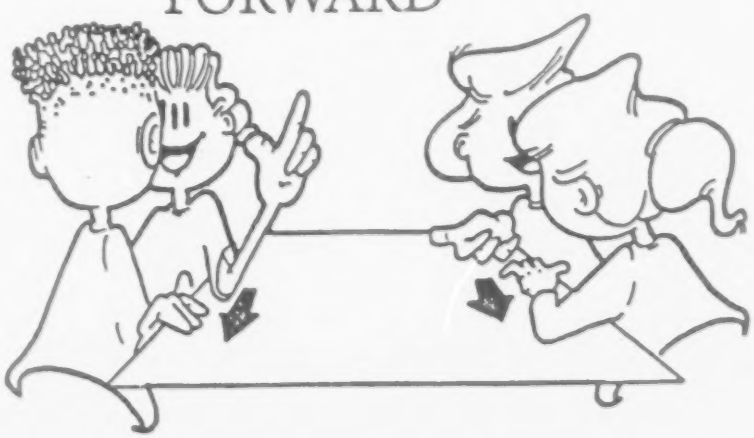
Active Listening

- EYE CONTACT



- NODDING
- PARAPHRASING
- REFLECTIVE LISTENING

- LEANING FORWARD



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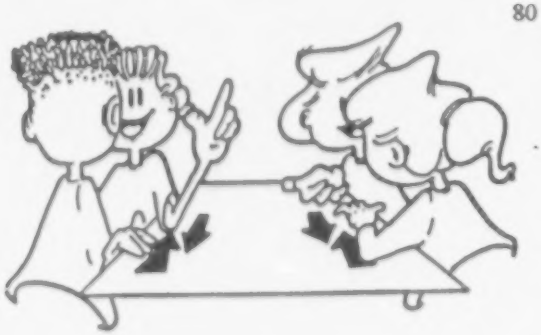
Blocks to Active Listening



Ordering:	You must...
Threatening:	If you don't, then...
Preaching:	You should...
Lecturing:	Do you realize...
Providing Answers:	What I would do is...
Judging:	You are bad...lazy!
Excusing:	You'll feel better...
Diagnosing:	I know what you need...

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8. Listening

I listen attentively to others and make an effort to understand what is being said.

STEPS TO GOOD LISTENING

1. Look at the person who is talking.
2. Think about what is being said.
3. Wait your turn to talk.
4. Say what you want to say.

If we are good listeners, people who talk to us feel respected and understood.

To be a good listener, pay attention to what is said. Don't interrupt, and show the speaker you are concentrating on what is being said.

To understand what is being said, think about it. If you don't understand, ask questions that will make what is said clear.

Being a good listener is important no matter what job you have. Your boss and co-workers want to know that you respect them, are interested in what they have to say, and understand what you have to do.

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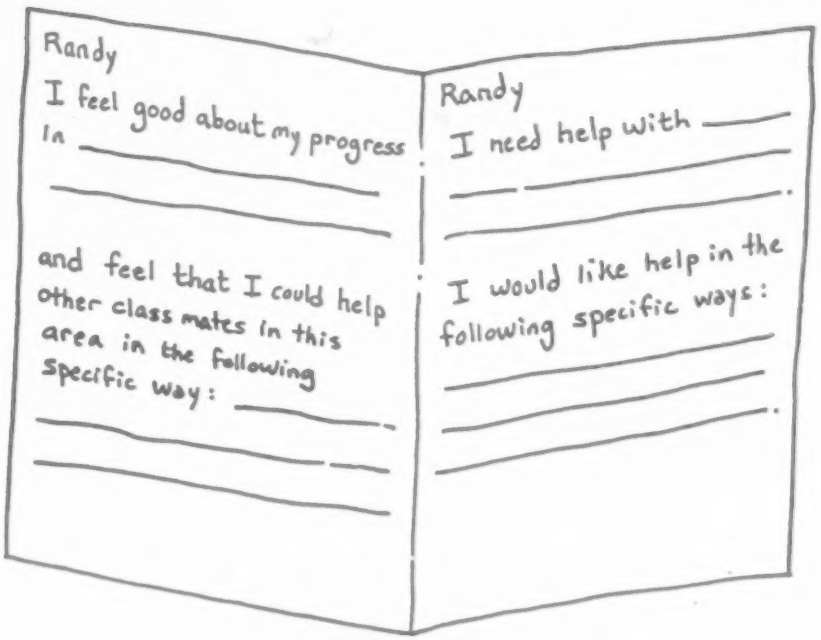
Each One Teach One

Ask students to assess their own academic strengths and weaknesses to determine in which content areas they need help and in which areas they feel capable of helping others. To facilitate this process you might ask students to create their own assessment sheet in the following manner: Fold a sheet of paper in half vertically and list help that can be given on one side and help needed on the other.


Randy
I feel good about my progress in _____
and feel that I could help other class mates in this area in the following specific way: _____
Randy
I need help with _____
I would like help in the following specific ways:

Assessment sheets could then be torn in half, turned in to a class-appointed committee to be sorted into stacks of **Help Available** and **Help Needed.**

A class list could then be made and posted to allow students to ask for and offer help as stated on the list. A time would need to be set aside for the help sessions. Some teacher guidance would be needed for the initial pairing and planning.

Each pair should evaluate the help session when it is over, then the total group should evaluate the session by listing and discussing positives and negatives of the experience.

Peer Tutoring Plan Of Action

Tutor _____

Student _____

Content Area: _____

Specific Needs: _____

_____

Overall Objectives: _____

_____

Materials Needed: _____

_____

Plan

Session 1—Specific Objectives: _____

_____

Session 2—Specific Objectives: _____

_____

Session 3—Specific Objectives: _____

_____

Evaluation by student: _____

_____

Evaluation by tutor: _____

_____

Next time we would: _____

_____

Outline For "Each One Teach One" Peer Tutoring

I. Initial discussion and planning.

II. Self-assessment session.

III. Group analysis and list preparation.

IV. List posted, discussed, and tutoring pairs established.

V. Plan of action established: **Objectives, Time,** and **Number of Work Sessions.** Plan will need to be flexible to allow for turnabout so that each student can be both tutored and taught during the allotted time. (Two separate and consecutive time frames will best accomplish this goal.)

VI. Evaluation—How well did the plan work?

Building Class Identity Lessons	Lesson #
• Developing Class Rules	1
• Developing a Class Name	6
• Class Banner	7

3. Experiencing Mutual Support

Have you ever felt uncomfortable when you were asked to share something with a group of people you didn't know very well? Was this because you didn't like being "center stage" with all eyes focused on you, or was it the idea of sharing which made you feel uncomfortable? To experience mutual support within a classroom usually requires participants both to share and to receive, Some teachers do not see the need to help their students develop connections and learn how to give and receive support. I stress the concept of giving and receiving because that's the crux of "mutual support." It needs to be a two way street, giving and receiving. Some teachers and students have problems sharing, others have difficulties with receiving. As a result, it's important for the teacher to create structured opportunities through lessons and activities which provide experience in both giving and receiving support.

As a classroom teacher you have a unique opportunity to assist students to find out more about themselves and at the same time to develop positive regard between class members. Once students have gotten acquainted and built class identity, structuring situations for them to "experience mutual support" is the next step in the classbuilding process.

Some Activities

Electricity

This activity can be used as part of a community circle. Tell students you are going to conduct an experiment in "reaction time." Ask them to all hold hands. When they feel a squeeze on their hand students are to pass it along to the person on the other side of them. Squeeze the hand of the person on either side of you. See if you can see the signal travel. Ask students to add a sound when they feel the squeeze. Try having the signal go both directions. You can discuss how energy moves through a group.

Trust Walk

Discuss with students the importance of being able to trust your classmates. Ask students if they have ever seen a person who is blind. Does it look difficult to get around when you are blind? Explain that you would like students to have the opportunity to experience what it is like to be dependent on another person and also have someone dependent on you. Have students pair-up and decide which will be person A and B. Have all the "A's" raise their hand.

"B's" will start by being the "blind" followers. Their job is to keep their eyes closed and allow their partners to lead them around the room. Each "B" needs to pretend they cannot see and to trust their partner.

The "A's" will be the guides and will be responsible for the "B's". They are to carefully take "B" around the room and while doing so, have person "B" touch or smell things which they might find interesting. Remind students that this is a trust building activity and not to lead their partner into uncomfortable situations.

After three to five minutes have students reverse roles. Later, discussion can center on how it felt to be dependent on another and how it felt to be responsible for another? Which was more difficult?

Appendix G
Childrens' Literature

Childrens' Literature List

Alexander and the Terrible, Horrible, No Good, Very Bad Day by Judith

The Grouchy Ladybug by Eric Carle

Tar Beach by Faith Ringgold

Let's Be Enemies by Janice May Udry

The Owl and the Woodpecker by Brian Wildsmith

The Zax by Dr. Seuss

Six Crows by Leo Lionni

The True Story of the Three Little Pigs by John Scieszka

Spinky Sulks by William Steig

A Chair for May Mother by Vera Williams

Appendix H
Higher Order Thinking

Birthday Surprise

In each set of sentences below, find the secret word that "surprise" replaces. It replaces the same word in all four sentences of a set. However, the secret word is different for each set. After you decode the three secret words, discover the birthday surprise by completing the sentence at the bottom of the page.

Set One

1. We picked up our airplane "surprise" an hour before the flight.
2. I received a parking "surprise" for parking in a no-parking zone.
3. Did you save your "surprise" stub from the movie?
4. I could not get a "surprise" for the play.

surprise = _____

Set Two

1. At the party, everyone had a "surprise."
2. The seal balanced the red "surprise" for almost a minute.
3. The committee organized a charity "surprise" to raise money.
4. I made the snowman's head the size of a bowling "surprise."

surprise = _____

Set Three

1. Ten people were photographing "surprise" on the jungle safari.
2. The "surprise" was called off because of rain.
3. "Crazy eights" is my favorite card "surprise."
4. Chess is a difficult "surprise" to master.

surprise = _____

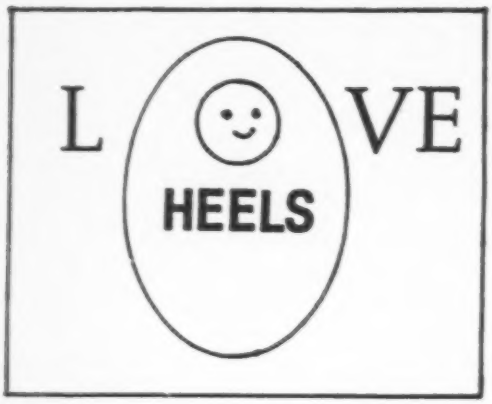
The birthday surprise:

a _____ to the _____ _____

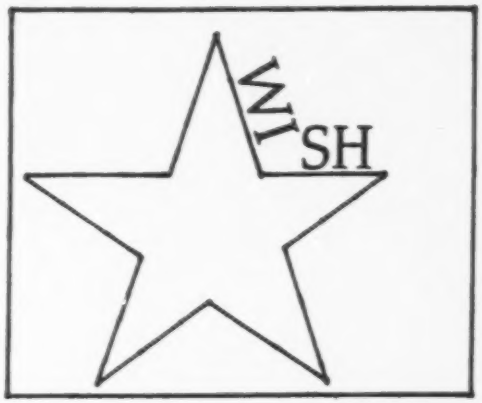
(Set One) (Set Two) (Set Three)

Mystery Phrases

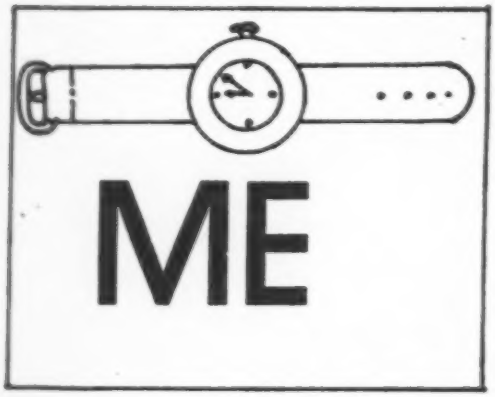
Each of these strange word-cartoons illustrates a familiar phrase. Beneath each cartoon, write the expression it illustrates.



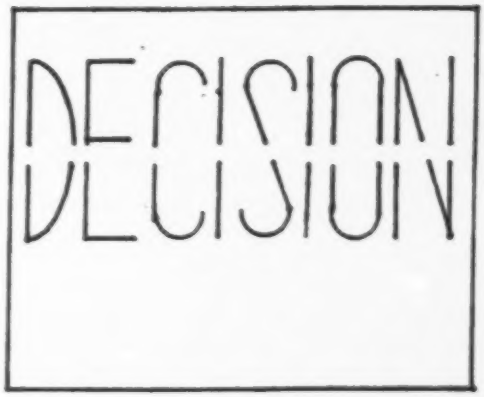
a. _____



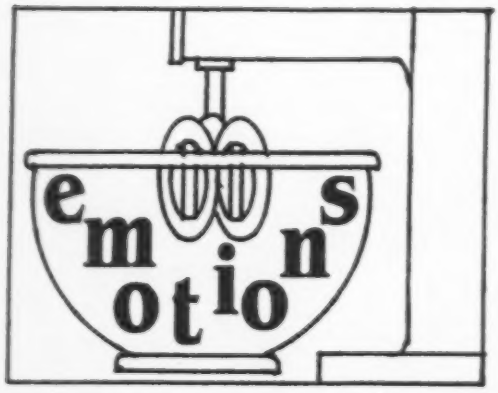
b. _____



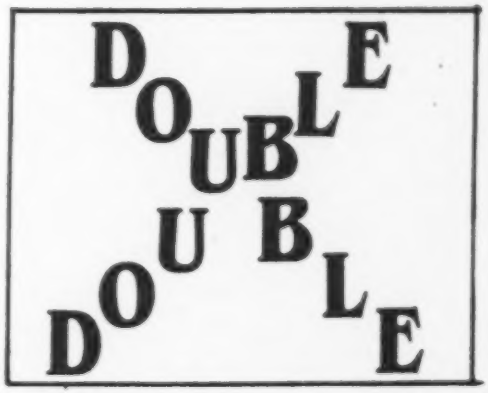
c. _____



d. _____



e. _____



f. _____

Name _____

Name _____ Date _____

Don't Forget the Toothbrushes!

Think & Organize

The time is far in the future. You are in charge of ordering goods for a community that is being started on a distant planet. The buildings have already been built. Humans can breathe the air and will be able to grow some food. You must decide what else they will need. These items will be sent on the first spaceships. Make a list of everything you think the first settlers will need for everyday life.

Put these words into several groups or categories. The categories might include foods, business supplies, or furniture. Create as many categories as you need. Add more items. Be sure you have several items for each category.

Write

Write a report to the head of the new community. Tell what you are sending. Describe each category and give your reasons for including them. Choose a few individual items and go into more detail about how they can be used. These might include funny things, like trading chocolate bars to aliens, or serious ones, like special medicines for space diseases.

Reread your report. Is your report more than just listing sentences? Do you discuss reasons and suggestions, too? Edit your report so that it shows you know about space and about the needs of people.

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Corn, Cabins, and Carriages

People have always had the same basic needs, such as food, shelter, and transportation. In different places, these are supplied in different ways.

List three ways people you know get food:

1.

2.

3.

List three different types of shelter people in your area use:

1.

2.

3.

List three different types of transportation people in your area use:

1.

2.

3.

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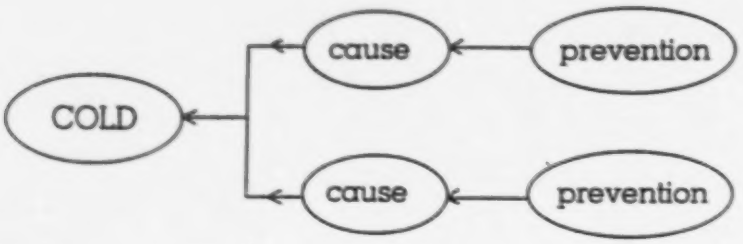
Ker-Choo, Again

Think & Organize

Pretend you are a kindergarten teacher. Many students in your class have colds. You want your students to understand what causes colds and how they can avoid getting them. Create a graphic organizer like the one below. List what causes colds. For each cause show ways the students can try to stay healthy.



Write

Plan a picture book to use with students. It should help them understand the causes and prevention of colds. It can be a story or a nonfiction book. Write what the text will say on each page and describe a picture to go with the words. The format below is an example of how you can do this.

Description	Story
Page 1 A small girl with a very red nose is in bed. She looks very sick and unhappy.	Amy has a cold! Have you ever felt like this?

Reread your book. Is it interesting enough for kindergarten students? Do you use too many big words or long sentences? Are the descriptions for pictures complete enough for an artist to understand?

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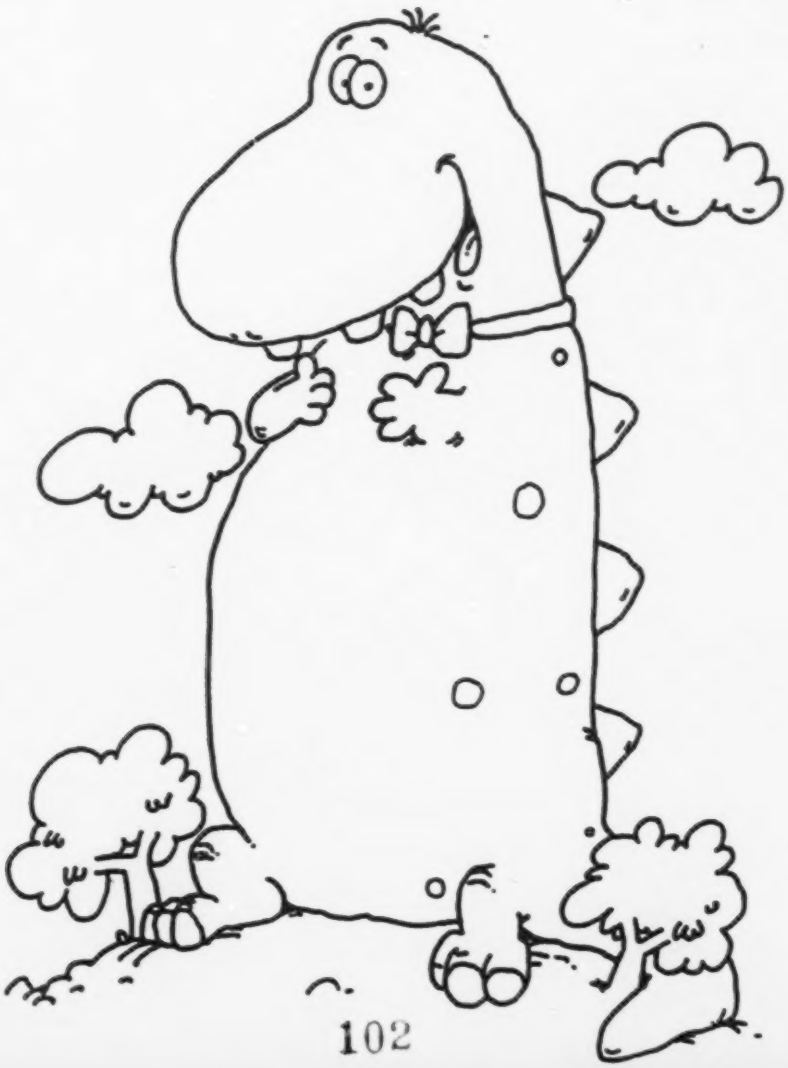
Baying Like a Foghorn

Write Write a poem about the animal.

Like a fluffy pillow,
Soft and white and warm.

Read your poem out loud. Think about the words you've chosen, both what they mean and how they sound with the other words you've used. Change any that aren't quite right.



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Name _____ Date_____

A Wonderful Place

Think & Organize Authors use words to help readers understand how their characters feel about a place. The quote below is from *Charlotte's Web* by E. B. White. The author uses description to tell how the children feel about the fair and what goes on there.

> "The children grabbed each other by the hand and danced off in the direction of the merry-go-round, toward the wonderful music and the wonderful adventure and the wonderful excitement, into the wonderful midway where there would be no parents to guard them and guide them, and where they could be happy and free to do as they pleased."

Circle the words and phrases that help you understand how the children are feeling. How do you think the author feels about a fair?

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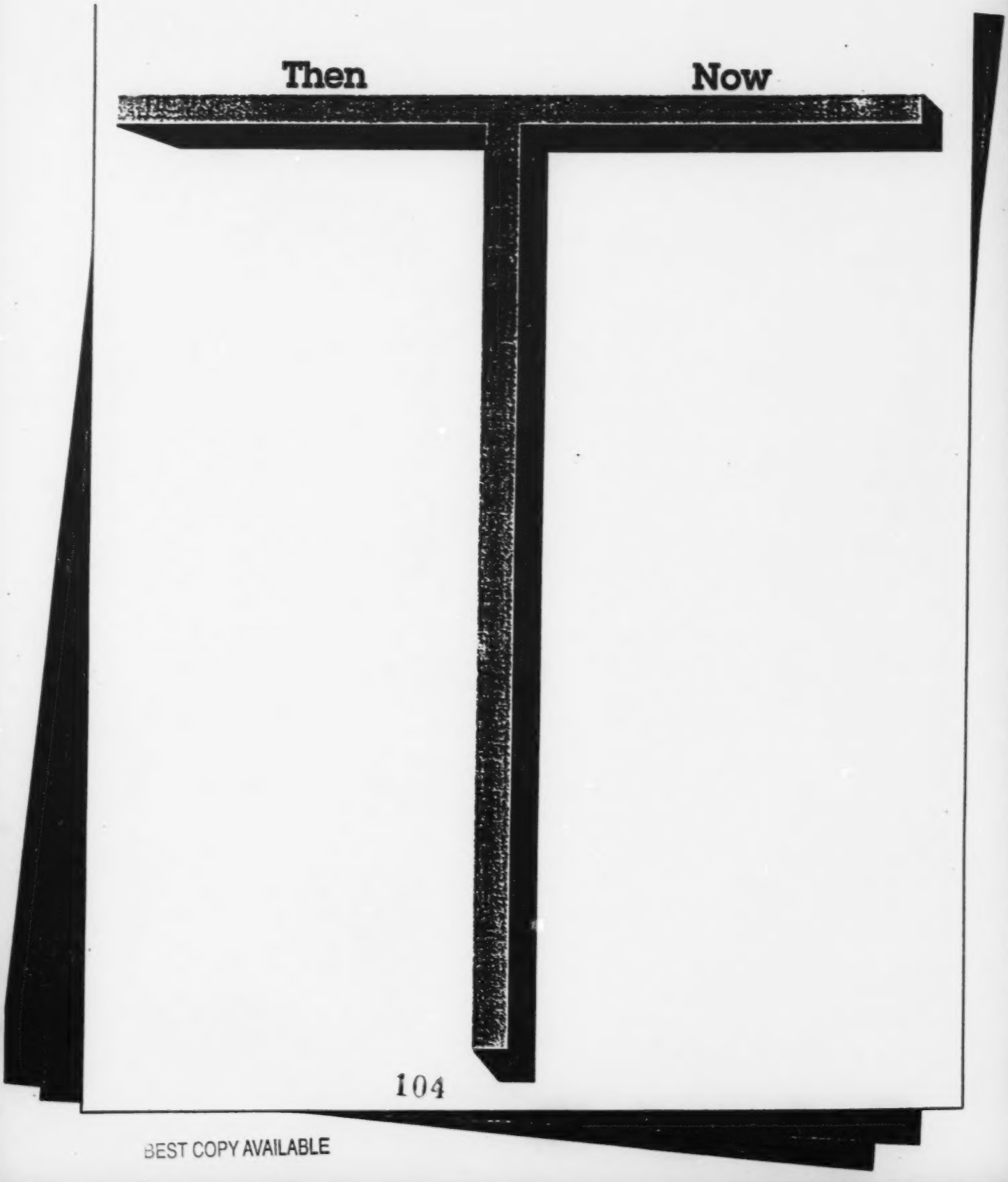

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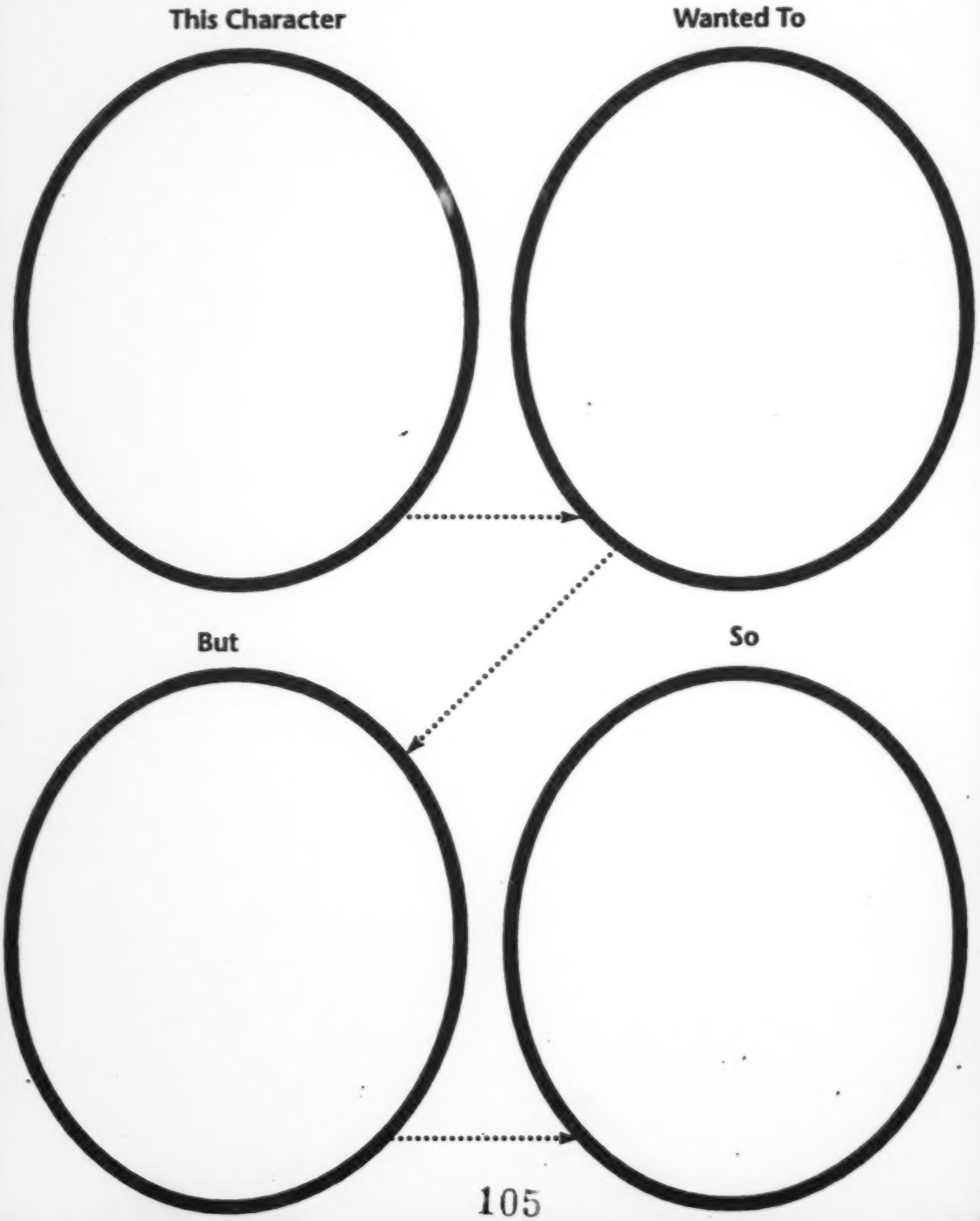
Name _____ Title _____

Story Pattern



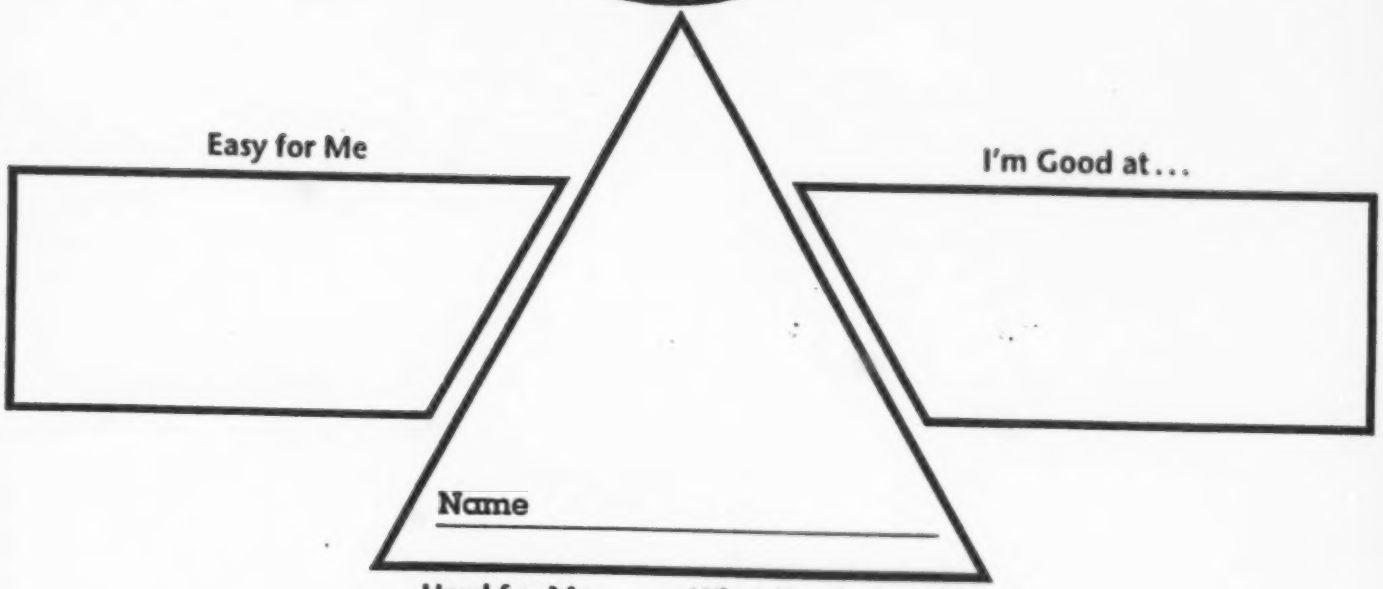
Report Card for _____

Written by _____ 96

Traits/Characteristics Evaluated	1	2	3	4	5
_____	○	○	○	○	○
_____					
_____	○	○	○	○	○
_____					
_____	○	○	○	○	○
_____					
_____	○	○	○	○	○
_____					
_____	○	○	○	○	○
_____					

Comments _____

Look at Me!



Hard for Me

What I've Accomplished

In the Future I'd Like to...

QUESTIONS

Thinking Skill: Hypothesizing

FAT?	*SKINNY?*
1.	*1.*
2.	*2.*
3.	*3.*
4.	*4.*

SKYLIGHT PUBLISHING

RANKING

Thinking Skill: Prioritizing

1.

2.

3.

4.

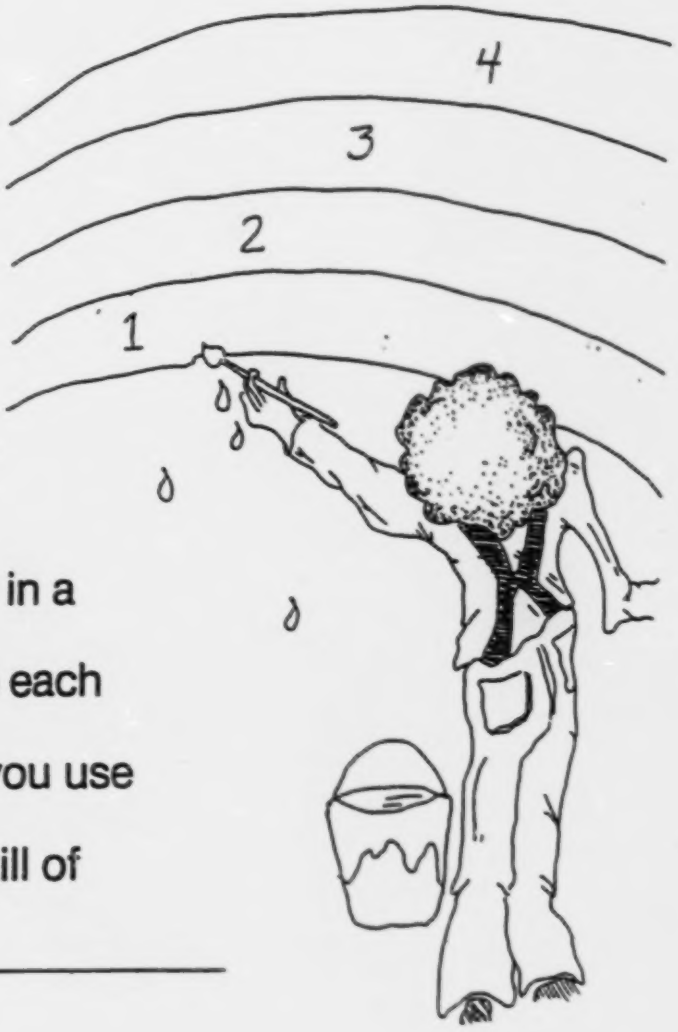
T-CHART

Thinking Skill: Visualizing

Looks Like	Sounds Like

Student _____

Date _____



Color in a space each time you use the skill of

_____

I will _____

Then I can _____

Student Teacher

_____ _____

Date _____

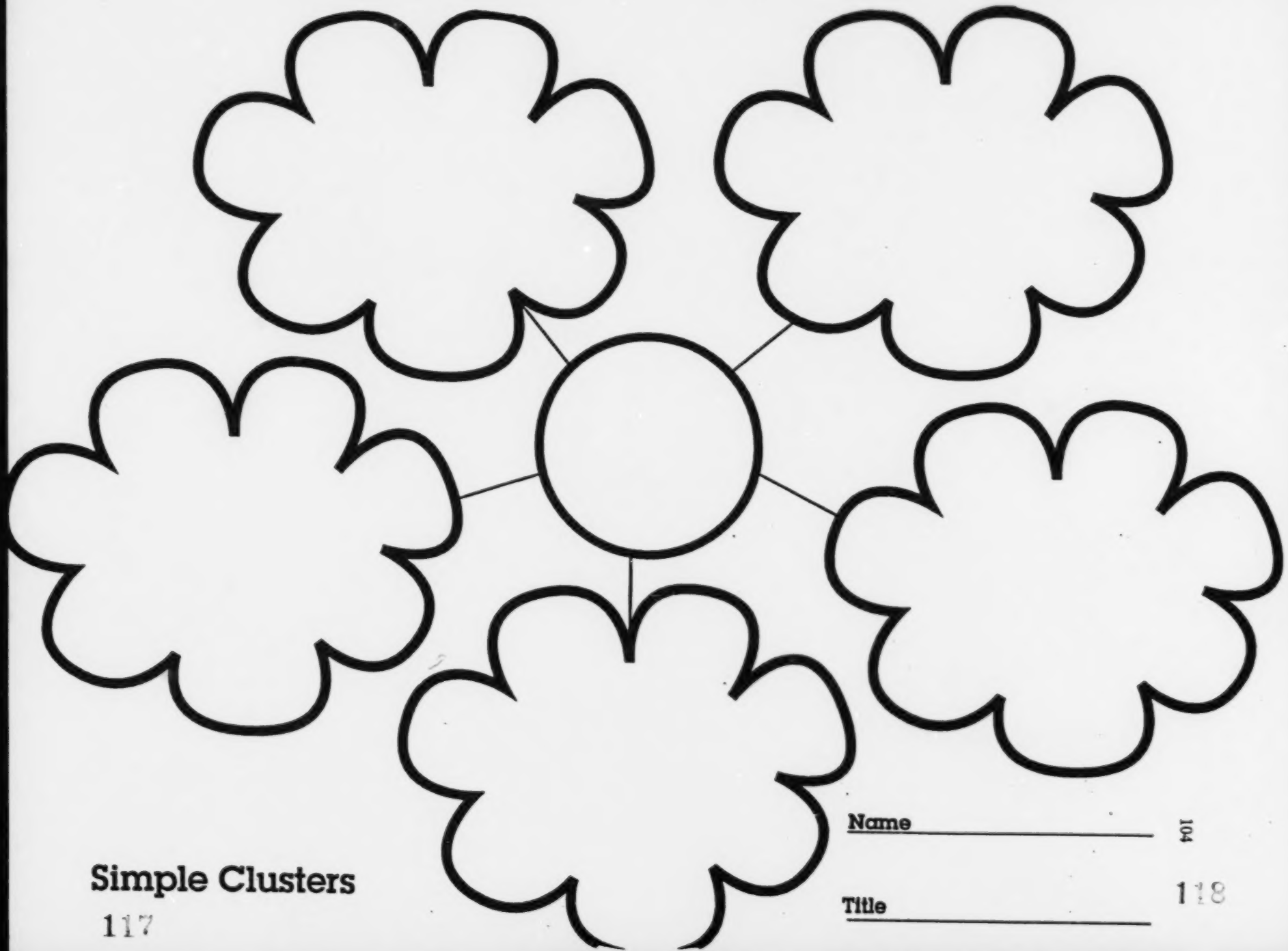
Student _____

Color in a balloon each

time you use the skill of

_____

Date _____



Name _____ 104

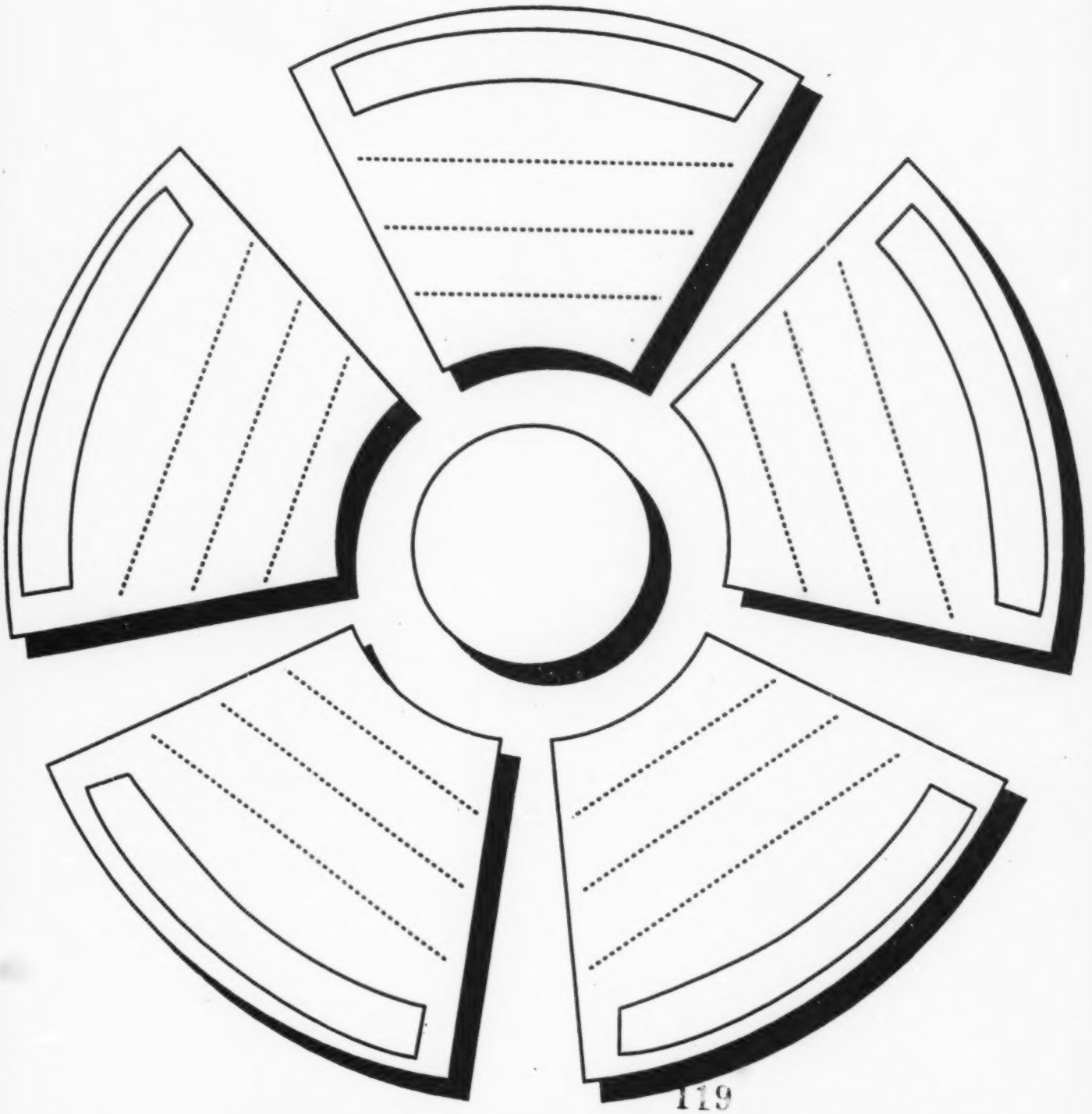
Title _____ 118

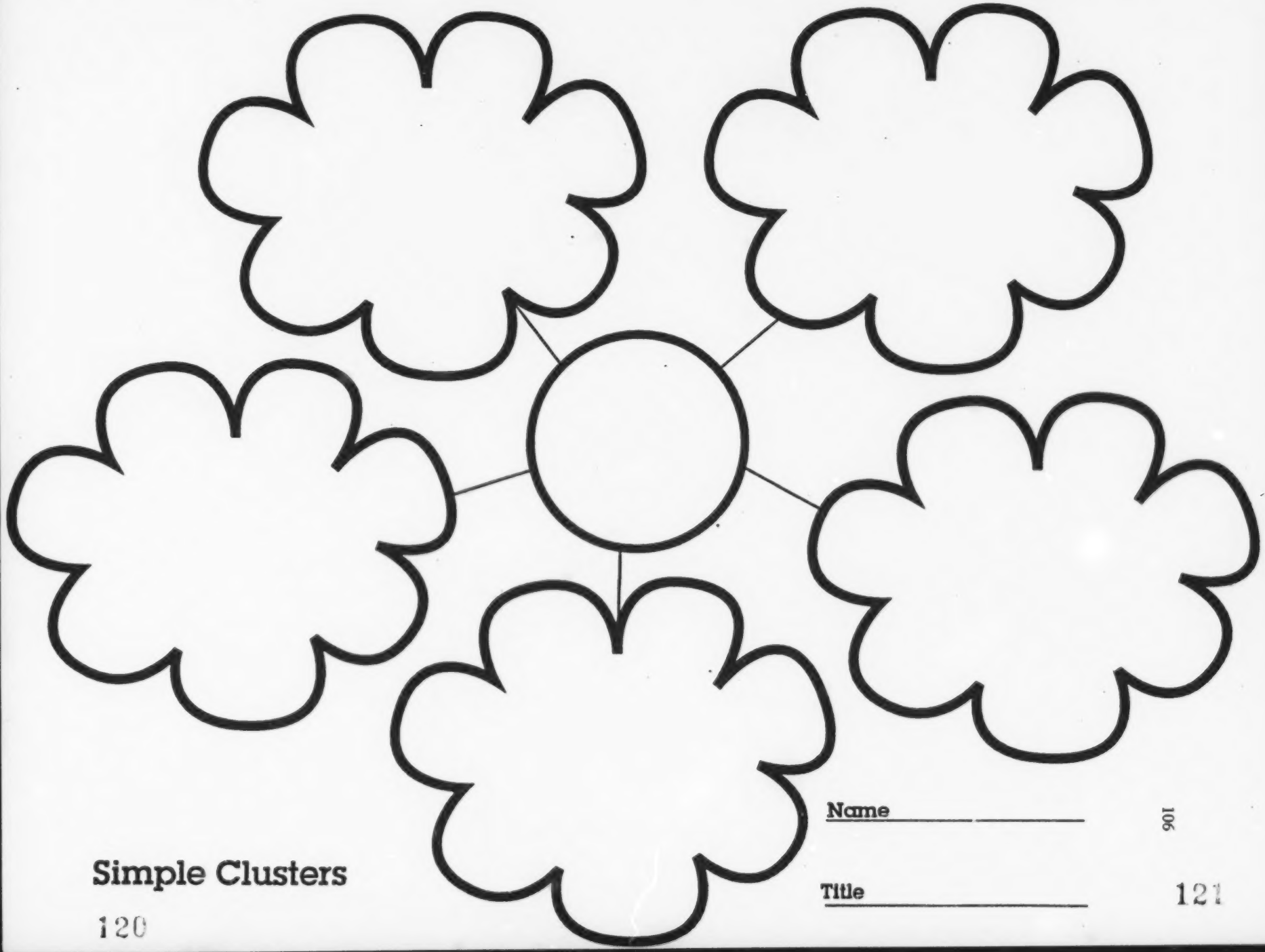
Simple Clusters

117

Name _____ Title/Topic _____

Circle Chart





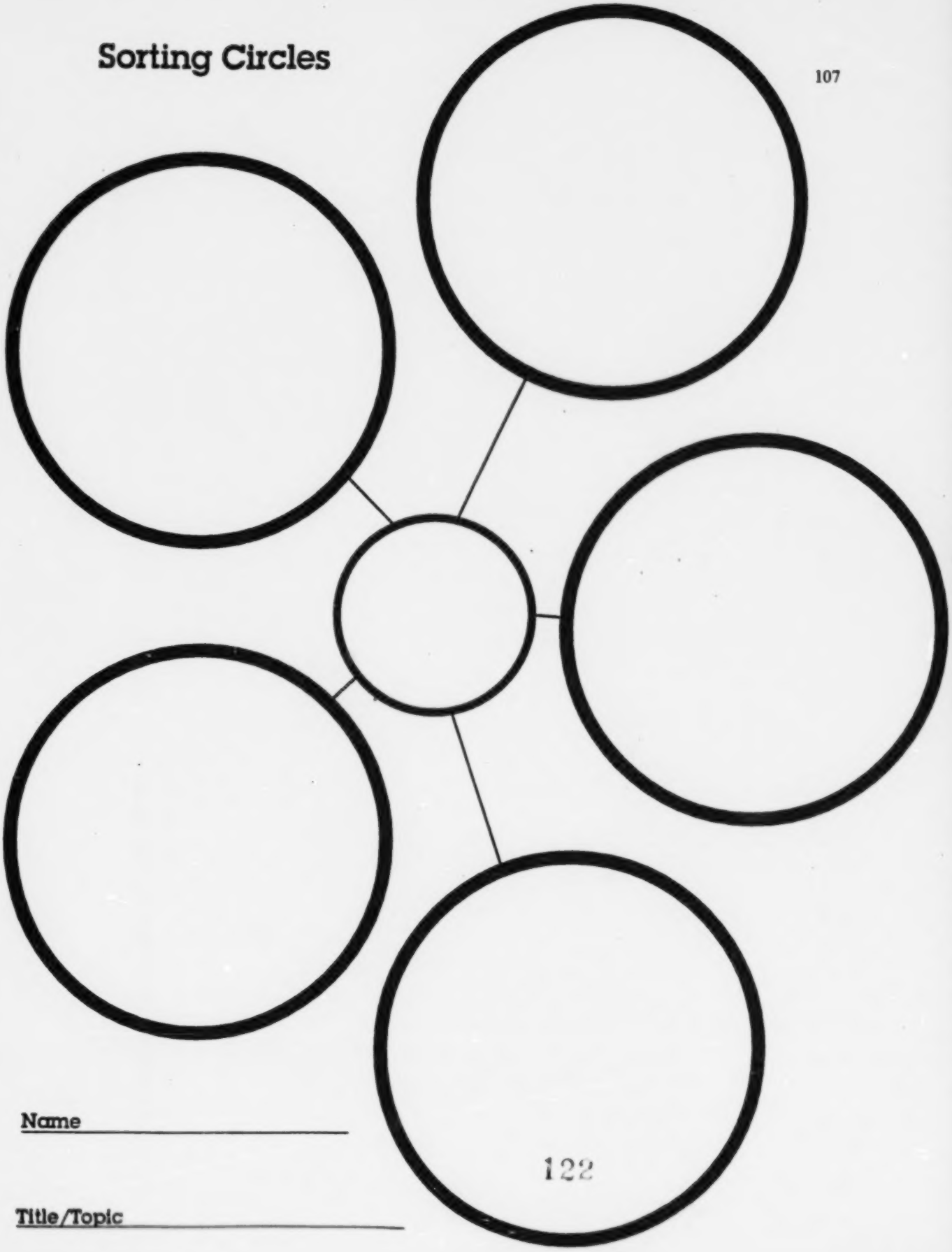
Name _____ 106

Title _____ 121

Simple Clusters

120

Sorting Circles

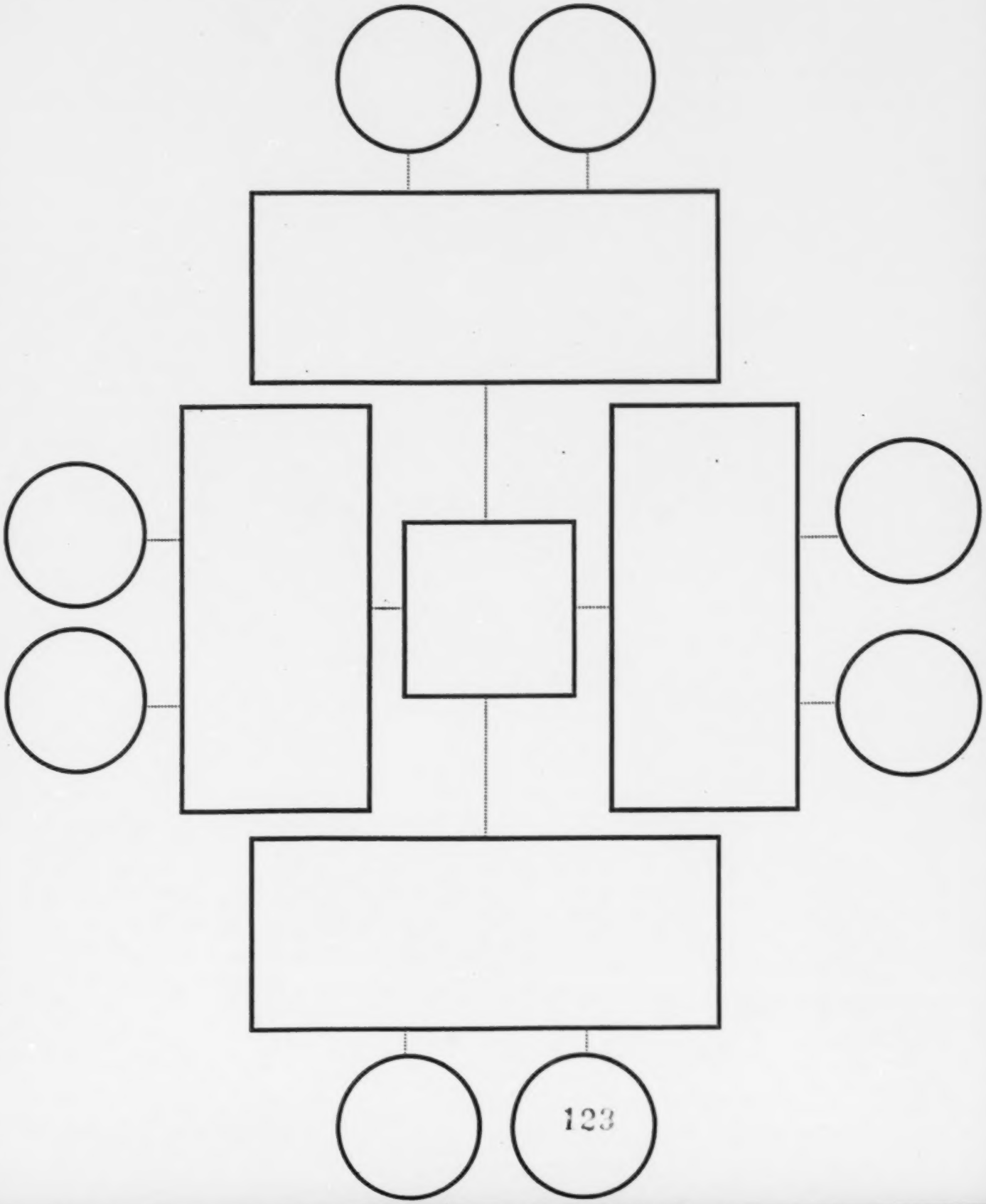


Name _____

Title/Topic _____

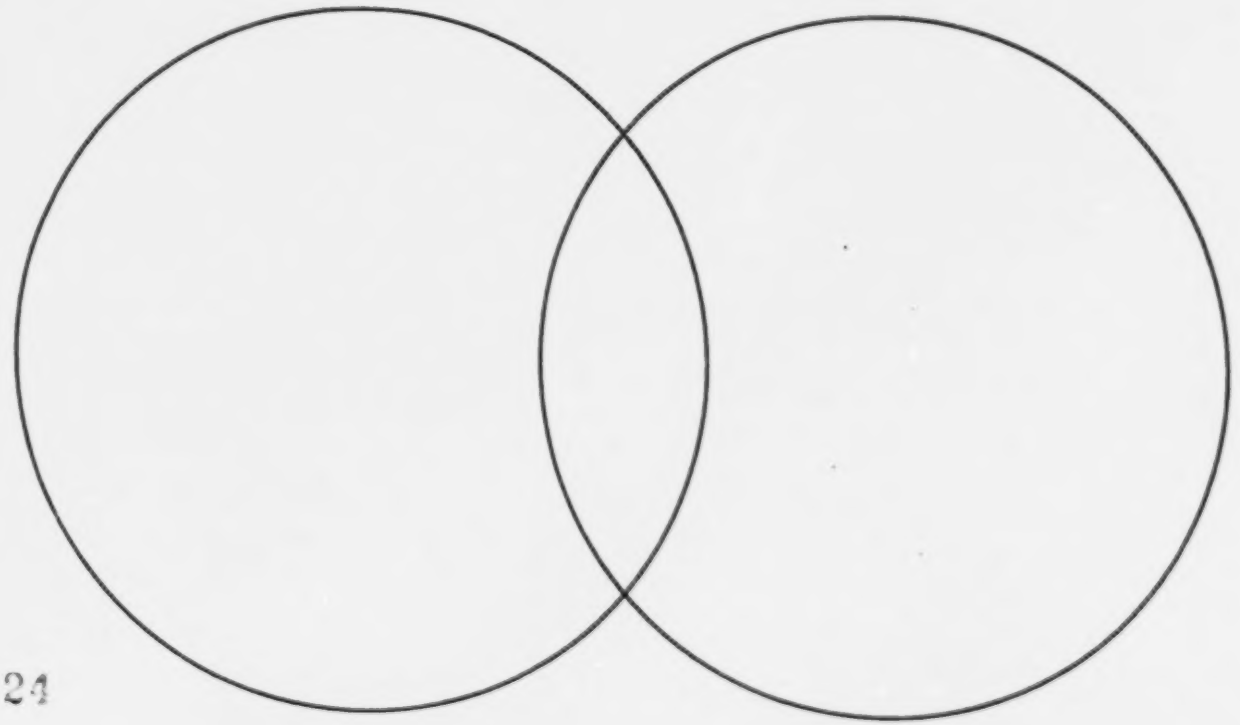
Complex Clusters

Name _____ Title/Topic _____



VENN Diagram

Thinking Skill: Comparing & Contrasting



124

125

Appendix I
Miscellaneous

Dear Students,

We would like your help in completing a survey. The survey is for our Field Based master Program at St. Xavier University. Your grade will not be based on the outcome of the survey. If you decide to participate in the survey the information you provide will not be share with any one else. Thank you for your support.

Sincerely,

Dear Students,

We would like your help in completing a survey. The survey is for our Field Based master Program at St. Xavier University. Your grade will not be based on the outcome of the survey. If you decide to participate in the survey the information you provide will not be share with any one else. Thank you for your support.

Sincerely,

September 9, 1996

Dear Parents,

An action research plan is being conducted by Mrs. Matthews, a student, in the field based program of St. Xavier University. Your child will be involved in a plan to improve problem-solving skills through peer mentoring and cooperative conflict resolution. The data and information collected from activities and assessments will be used on a strictly voluntary and confidential basis. Your signed permission is required to include your child's data. There are no penalties if you decide not to grant permission. Please complete and return the form below. If you have any questions or concerns please call King School at 966-3370. Thank you for your cooperation.

Sincerely,

Mrs. Matthews
Reading Teacher

Please sign and return by **September 13th.**

_____Yes, you may use my child's data and information

_____No, you may not use my child's data and information.

Signature 127